



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# Journal of the Society of Arts.

FRIDAY, MARCH 9, 1866.

## Announcements by the Council.

### ORDINARY MEETINGS.

Wednesday Evenings, at Eight o'clock:—

MARCH 14.—“On Visible Speech, or a Universal and Self-interpreting Physiological Alphabet.” By ALEXANDER MELVILLE BELL, Esq., F.R.S.S.A. On this evening Alexander J. Ellis, Esq., F.R.S., will preside.

MARCH 21.—“On Deer Forests and Highland Agriculture in relation to the Supply of Meat.” By Professor LEONE LEVI.

### CANTOR LECTURES.

A Course of Lectures by Dr. F. Crace Calvert, F.R.S., will commence in April. Particulars will be duly announced.

### FINAL EXAMINATIONS.

The Rev. J. S. Brewer, M.A., Professor of Modern History and English Literature in King's College, London, has been appointed Examiner in English History.

## Proceedings of the Society.

### MUSICAL EDUCATION COMMITTEE.

The following letter has been addressed to the Secretary by Mr. Macfarren, who wishes it to be regarded as a supplement to his evidence given before the Committee:—

SIR,—An article in the *Athenæum*, of January 27, signed by Mr. Chorley, invites discussion of the point it proposes as an essential incident in any plan for a National Musical Academy; and I therefore, with every wish to do justice to the writer, offer the following remarks upon his views.

The proposal of Mr. Chorley is, that in such an institution there should be one text-book for each branch of study, and that the professors should bind themselves to teach according to its tenets. Mr. Chorley mistakes in supposing that this point has been overlooked by the witnesses before the Committee of Musical Education appointed by the Society of Arts, since, in the evidence I had the honour to submit to that body, I most emphatically urged the contrary opinion, namely, that each professor should teach according to his own system, but should have one or more sub-professors to prepare, under his direction, pupils for his class. In support of this let me adduce the obvious fact that no conscientious teacher can pledge himself to any uniform system or fixed theory, since his own experience in the practice of art and in tuition must constantly reveal to him new aspects of the subject to which his attention is directed, and it thus becomes his duty from time to time so to modify his course of instruction as to communicate in it his latest and best matured convictions.

A professor would be a mere machine who was restricted to the inculcation of any fixed doctrine, though even himself had been consulted in framing its limitations;

and, in my belief, no one of such intelligence as should entitle him to a professorship in a National Academy would or could consent to become this mere machine.

It is one of the most obvious advantages of the Royal Academy of Music that the pupils of different professors, being in familiar intercourse with one another, discuss the various principles of their several teachers; for they have thus, in defending each the system of his own respective master, the best means of making clear to themselves their own perception of its tenets, and they have also the opportunity of comparing this system with others, and so enlarging their own views by a comprehension of the discrepancies and the identities between the divers systems taught in the institution. Let me distinctly state, however, that I think a student should never receive lessons at the same period from more than one professor of the same branch; a plan which, I am aware, prevails in some continental conservatoires, and which has the ill effect of tempting a pupil to compare the qualities of his several instructors, whereby he may frequently lose respect for both, and thus rarely can profit from either.

The science of music is manifestly as progressive as the art; it would, therefore, be as monstrous to establish in 1866 a code of tuition in any of its branches that should be enduring to future generations, as it would have been, any number of centuries since, to have legislated for the doctrines to be taught at present.

Lastly, the too just complaint, from time immemorial, against academical institutions—the complaint of the narrowness, prejudice, pharisaism, pedantry, and conventionality of the views they disseminate—may be averted by the admission of a plurality of methods; thus, and thus only, can that liberal spirit have free action which should characterise every foundation of the present age, and which is indispensable to the discovery of truth and its promulgation.

Trusting that these remarks may be received as proceeding from no spirit of opposition, far less from one of self-assertion,—I am, &c.,

G. A. MACFARREN.

7, Hamilton-terrace, N.W., Feb. 21st, 1866.

### FOURTEENTH ORDINARY MEETING.

Wednesday, March 7th, 1866; William Hawes, Esq., F.G.S., Chairman of Council, in the chair.

The following candidates were proposed for election as members of the Society:—

Baker, Rev. Charles, M.A., Tellisford, Somersetshire.  
Hunt, John Hammond, 20, Cannon-street West, E.C.  
Loy, William T., Dingwall-road, Croydon, S.  
Whitelaw, John, Dunfermline.

The following candidates were balloted for, and duly elected members of the Society:—

Betjemann, G. W., 38, Pentonville-road, N.  
Creed, H. Herries, Windham Club, St. James's-sq., S.W.  
Curtis, John, 111, Westbourne-terrace, W.  
Freutel, Henry, 124, Kingsland-road, N.  
Hutton, T. Maxwell, Summerhill, Dublin.  
Longdon, Frederick, Derby.  
Northway, John, 27, Great Tower-street, E.C.  
Woods, Miss Elizabeth, 27, Hyde-park-gardens, W.

The Paper read was—

ON THE LATE ANGLO-FRENCH EXHIBITION, WITH A PROPOSAL FOR THE FORMATION OF AN ANGLO-FRENCH ASSOCIATION.

By ROBERT CONINGSBY, Esq.

The Anglo-French Exhibition, held at the Crystal Palace last autumn, was a double experiment. It was intended to solve two questions; first, can a working-class exhibition be got together in which

amateur productions are, as a rule, excluded; secondly, are French artisans sufficiently friendly towards their English brethren to co-operate with them in a public work? To furnish a satisfactory reply to these two queries was the object my committee had before it from the commencement to the close of its labours. If, therefore, we have succeeded in this, I hope that in a great and rich community like ours, we shall not be too harshly judged when we confess that the experiment has cost £500 or £600.

With your permission, I will briefly relate the circumstances which led to the promotion of our exhibition. In the autumn of 1864 a party of friends, of whom I was one, paid a visit to the Working Class Exhibition at the Agricultural Hall, at Islington. Our object was to see the display and form an independent opinion upon the merits of the exhibition movement generally. The results of that visit I had the honour to lay before the public in the columns of the *Daily Telegraph*. We were dissatisfied with the prominence given to amateur and unfinished productions, and, in no spirit of narrow-minded exclusiveness, we suggested that before a work was publicly exhibited some standard of excellence should be attained to. We believed that the system of offering premiums to men to neglect the study of their own art and dabble in another, was more likely to prove mischievous than beneficial, and we said so. In reply to my letters, a gentleman on the North London Exhibition Committee ably expressed the opposite views, and threw down a challenge to me, to see if I could get up an exhibition on the skilled work theory. There is something very terrible to an Englishman about an unaccepted challenge. But for some time, feeling my own obscurity, I allowed the gauntlet to lie unheeded; but the words "see what you can do," so haunted me, that at length, with considerable diffidence, I ventured to pick it up.

I had the honour of acquaintance with men employed by some of the most eminent London firms. I asked if they would help me in the promotion of a skilled work exhibition? As I did not get a single refusal until a committee of fifty were got together, I think it was a sign that, at all events, among skilled workmen themselves, there was no disinclination to give my theory a trial. On the 2nd of March, 1865, we met and formed our committee, and at that meeting I proposed that we should extend our plan so that French workmen might, if they pleased, exhibit with us. The year 1865 being the jubilee of peace, we thought that the time was a favourable one for striking a blow at the jealousies and prejudices which have for so long kept the citizens of the two empires apart.

We decided that our exhibition should not only be a skilled work, but an Anglo-French, display. We issued our preliminary prospectus and asked for guarantors. Mr. Cave, M.P. for Shoreham, was our best friend in this matter, and to that gentleman the members of the Committee feel that they cannot sufficiently express their thanks, over three hundred pounds being guaranteed by Mr. Cave and his private friends. Further, when I wrote, at the close of the Exhibition, to express regret at the unfavourable monetary result of the experiment, Mr. Cave replied—in a letter full of kind and sympathising expressions—"I beg that you will think as little of my trouble and expense as I do." As soon as we found our guarantee fund progressing favourably we took steps towards securing a site. After much discussion we fixed upon the Crystal Palace, and to that one decision we attribute our commercial failure. The distance from town, and the loss of the night incomes enjoyed by other exhibitions, were fatal, and counteracting advantages, upon which the committee had relied, were not forthcoming. After numerous interviews with the officials of the Crystal Palace Company, the sub-committee appointed for the purpose of securing a space, reported, on the 19th of April, that they had made the necessary preliminary arrangements, and the next subject taken

into consideration was the deputation to wait upon the French workmen. The following minute was passed: "That a deputation, consisting of the five following members of the committee, be requested to proceed to Paris immediately, for the purpose of inviting French workmen to join their English friends in promoting the Anglo-French Exhibition;" the names were appended. I had the honour to be one of that deputation, and, as it may interest you to know how we were received, I will give a brief sketch of our proceedings. We obtained a few letters of introduction from influential gentlemen in London, and arrived in Paris on the 23rd of April. We had been previously told in London that the French working class would receive us coldly, that the alliance might be thought all very well among the educated portion of the people, but was not popular among the lower. Our experience, Sir, convinced us that this was an error. We not only found the upper classes friendly, but the workmen enthusiastic; and what seemed to astonish them most was, that English artisans, whom they had been in the habit of looking upon as cold and prejudiced beings, should have wished to be friendly with them at all. The two nations seem to long for an intimate and cordial friendship, but the "one is afraid and the other dares not" take the first step towards increased familiarity. Official and Governmental alliances are very well as far as they go, but a close and abiding friendship can only exist between people who know one another.

We commenced the delivery of our letters upon arrival, and for a week we passed to and fro from one arrondissement to another, calling upon editors, senators, deputies, prudhommes, and manufacturers, and receiving the utmost courtesy from all. Our plan was to deliver a letter of introduction, and when the gentleman to whom it was addressed expressed himself favourably towards our scheme, to ask him for two or three letters to any friends of his who were likely to be of service. This request being generally complied with, our work increased at the rate of the well-known horse-shoe problem. The more letters we delivered, the greater grew our task. Towards the end of the week we had interested enough people in our plans to make the formation of a French committee a practicable step. From introductions kindly given by M. Chevalier, whose name is almost as well-known in this country as it is in France, we made the acquaintance of some gentlemen connected with a very respectable association called the *Société du Crédit au Travail*. By their agency a meeting of delegates from a number of trade societies, at which between seventy and eighty were present, was called at an office in the Rue Baillet, and we were invited formally to lay our scheme before them. We did so, and I am certain the other members of the deputation who are present here to-night will bear me out when I say that nothing could exceed the enthusiasm with which these representatives of some thousands of Parisian workmen received our invitation to fraternise with their English brothers. All, however, agreed that the notice was too short, and warned us that we must not expect a large quantity of articles from France; and we were implored not to make the mistake of supposing from that that the French workmen looked with coldness upon the undertaking. They agreed with us that the date was an auspicious one, and upon that account the experiment should at once be made, but must be well understood as being only the preliminary to some future demonstration which should more worthily testify to the great wish which animated all to be on terms of intimate friendship with those on this side of the channel. They asked many questions and made such pertinent remarks as proved them to be a highly intelligent and business-like body of men. Ten gentlemen were there elected to form a provisional committee, with power to add to their number. As we left the room we were completely embarrassed by the number of invitations we received to visit different gentlemen. As we considered our work in Paris

now over, we were resolved to return at once, so we were compelled to refuse all but one, which was to take breakfast with the members of the provisional committee the next morning. Not to be thus put off, a number of delegates followed us out of the house—and I think I may use the expression literally—carried us by storm into the nearest elegant café, and, in spite of our most strenuous protests, insisted upon our taking some refreshment with them. During the hour thus spent we were entertained by their lively conversation, and could not help saying to each other, "What a pity it is that these jolly fellows and our friends at home don't meet oftener."

But now I must make the first and only complaint against the members of the French Committee. I said we accepted their invitation to a plain breakfast—just a snack, in short, before we started upon our return journey. Accordingly we went to the Rue Baillet punctually at twelve (which as most of you know is a very usual hour for the second breakfast in Paris), with appetites calculated to sustain the British prestige. We were taken to a grand café in the Palais Royal, introduced to a number of amiable gentlemen, and, without a moment's warning, compelled to sit down to a banquet of I should be afraid to say how many courses. And there were speeches and toasts, and toasts and speeches, until the heads of the deputation were almost turned by the great warmth of their reception. As soon as the time for our departure had come, our hereditary enemies drove us to the hotel, and with much hand-shaking and many hearty expressions of goodwill, wished us a pleasant journey home. The following extract from our minutes of May the 3rd refers to this act of perfidy. "In conclusion, the secretary stated that the deputation had everywhere met with the kindest treatment and most ready offers of assistance. Before leaving Paris the members of the deputation had been entertained by the new committee; when, somewhat to their embarrassment, what was called in the invitation a plain breakfast, proved to be a most sumptuous banquet served at a café in the Palais Royal. Speeches were made and complimentary toasts drunk in a most enthusiastic manner." I am not, I hope, a spiteful man, but I should like some day to have revenge, and give those French gentlemen a "Roland for their Oliver."

On May the 24th the Council of this Society were good enough to hold a meeting of art workmen in this room, over which you, Mr. Chairman, most ably presided, when two resolutions were unanimously carried; the first, "that this meeting having heard the statement of Mr. Coningsby in reference to the proposed Anglo-French Exhibition, recognises in this movement an evidence of the gradual extinction of national prejudices, and of the great advance which has been made by the workmen of both countries in the knowledge and appreciation of the true principles on which the material prosperity and moral progress of nations depend." The second was one pledging the meeting to do all in its power to assist the committee.

We next proceeded to advertise for exhibitors, the members of the committee having previously canvassed among their friends. For some time the applications for space came in very slowly, for intending exhibitors, like intending testators, put off signing their papers until the last moment. At length, however, by dint of great exertion and giving our movement increased publicity, we were set at rest upon this point. But, inasmuch as life is one succession of compromises, we were compelled to so far depart from our desires as to admit specimens of skilled workmanship from firms, with the understanding that the names of the actual producers should be appended to each article shown. I must admit that this was only partially done, but the fault cannot be laid at our door; in every case where it was not, it was a breach of faith on the exhibitor's part, every one having signed a promise to the effect just named. Upon the 25th of May it

was thought desirable to have a member of the committee resident for a few weeks in Paris. So many letters and telegrams were constantly passing between Monsieur Potonié and myself, that the committee thought it would save time and trouble to have somebody who could reply on the spot to all queries and keep the French Committee constantly informed of our progress. Mr. Whiting, accordingly, left for Paris. Thence, I think, was a wise one, for matters went more smoothly afterwards. So far, with hardly an exception, our committee had been wonderfully unanimous, resolutions passing with great briskness; and, pressed as we were for time, it is, I think, to be regretted that some of us all at once became aware of a latent aptitude for debate. We began to move "amendments," and gradually there were two parties in our little chamber. Your humble servant and some others were occasionally in favour of despotism and strong measures; but, fortunately or unfortunately, as the case may be, a constitutional party—sternly resolved to trample down tyrants—arose, and long battles, with all the tactics of adjournments and "whipping-in," were fought over the bodies of departed minutes. I only mention these internal matters to obtain the character of impartiality as an historian. I may say, in passing, that the government were never left with a majority small enough to induce their resignation, and we are all on the very best of terms now, our public differences never having interfered with private friendships. From the beginning we laboured under two great disadvantages—want of money and time. I think, in judging our labours, this fact should be kept in mind. Our guarantors provided us with a certain amount of credit, but that most potent engine for rapid movement, a balance at the bank, we never knew the blessings of.

Our next step was to form a ladies' committee. Now, although this arrangement, like most others, had not sufficient time for the development of its full working powers, I have only to mention one fact to show how valuable it was, and invaluable it might have been, under more favourable circumstances. It was through the exertions of our ladies' committee that Her Most Gracious Majesty condescended to become an exhibitor by sending us that beautiful statue of the Prince Consort, which still forms a prominent ornament in the Palace at Sydenham. The ladies also collected for us a wagon load of most interesting subjects of art-workmanship of different periods, a collection which was never done justice to, for the simple reason that we were overworked, and could not properly classify and place them. When I find from our minutes that the subject of forming a ladies' committee was never mooted until July the 6th, and remember that the Exhibition opened on August 7th, I am ashamed to think how much more expeditiously things were managed at Blackwall, where the ladies' committee sat, than at Southampton-buildings, our own place of meeting. To Miss Arrowsmith, and the eight ladies who worked so energetically with her, I tender my most respectful thanks, and only hope that, in the event of this meeting agreeing with me as to the desirability of further humble efforts being made to increase the amity between Paris and London, the benefit of their assistance will be had again.

Our chief debates on the committee were about the admissibility or otherwise of certain articles into our Exhibition, which some contended were worthy, and some unworthy of a place in a skilled work collection. A man offered us a monster work in zinc. It had taken him a number of years to make, and it was admitted on all hands that for so unpromising a metal as had been used he had done great things. But the subject was an ambitious one, St. Michael Slaying the Dragon. It was urged, as a merit, that the dragon had seven heads, and, I think, as many tails, and I am not sure how many thousand scales, every one of which had been separately hammered. The work, if admitted, would have been our most prominent article, and as some of us thought very little of it as a work of art,

and even ventured to doubt the wisdom of selecting zinc for the material of so spiritual a work, we had fierce contests over the body of the dragon. Government carried the day by a large majority, and the work, with many others of a like nature, was declined with thanks. But the hydra-headed monster managed to sow his teeth in our committee, and much valuable time, which might have been spent in considering how we could invite a number of Frenchmen to London and make them comfortable, was taken up by grave considerations as to whether or not something which had been done was strictly in order. I have remarked that the exhibitors were very slow in sending in their goods. From various causes our French friends were the chief defaulters in this matter. Before we blame them, however, we should remember that their difficulties were much greater than ours. The whole Exhibition movement was new to them. They were at a distance, and had still to gain confidence sufficient to induce them to part with their goods. In matters of business the French nature is an exceedingly cautious one, and the Paris committee had to work against this national characteristic. As no French goods had arrived we were compelled to postpone the opening of the Exhibition. Well do I remember the hot bustle of the two or three days before the 7th of August, and gladly do I testify to the unanimity of our committee when there was positive right down hard work to be done. We all, from the brilliant and spirited leader of the opposition down to the humble secretary, went at it like Englishmen determined to carry a point. "You can't open; you will never be ready in time," said the Palace officials as they looked along our acres of bare walls and floors on Saturday, the 5th of August.

Well, on the 7th we were not so ready as we could have wished; a few packing cases were still to be seen about; but it has been said that in 1851, 1862, and again in the Dublin Exhibition, such things were not altogether unknown. And our resources were not greater than those of the Royal Commissioners. Only a few of the French goods had arrived, but the rest were promised, and we thought it wiser to open than have a second postponement.

Now, as to the choice of a great personage to open our exhibition. Our committee was a very independent one, and generally received any propositions for seeking patronage with little favour. We applied to two or three of the greatest people in the land, for we ventured to think that our efforts deserved more than a local recognition, and when from various causes these declined, somebody moved, and it was carried unanimously, that we should open the Anglo-French Exhibition ourselves. It was thought, however, that if some great employer, whose name was well-known to the world, would consent to come among us and preside over the ceremony, it would save us from the charge of an impertinent self-sufficiency. One of our number accordingly waited upon Mr. Herbert Maudslay, of the firm of Maudslay and Field, engineers, and that gentleman, assisted by Mr. Henry Maudslay, his cousin, presided at the committee's opening of the Exhibition. The inaugural ceremony was designedly of the simplest description. From the great Handel orchestra prayer was offered up the Rev. Dr. Emerton, who has throughout taken a friendly interest in our proceedings, and the Crystal Palace company's band discoursed sweet music. The chairman and Mr. Henry Maudslay both made capital speeches, in which they adverted to the fact of this being both the first skilled work, and the first International Industrial Exhibition; and touched upon some of the difficulties the committee had encountered in the prosecution of what they called this move in the right direction. The secretary then read a letter from Mrs. Cobden, and offered a few remarks; he was followed by Monsieur Potonié, the secretary of the Paris committee, who delivered a brief, but eloquent oration in French. Other speeches, from French and English gentlemen, followed, and the committee then walked through the gallery with the chairman. In

the evening the committee had a dinner, and were honoured with the company of M. Potonié and several other French gentlemen. Most of the daily papers treated the opening of our exhibition as an event, and headed their placards the next morning with the announcement. For the first week or two the number of visitors passing our turnstiles was good, but owing to the lateness of the season, the average attendance at the palace began to fall off, and it was soon apparent to all that the scheme would not pay. People grumbled at the additional charge after entering the Palace, as they always will. The public as a rule like to know what they will have to pay before instead of after entering every place of amusement. To increase the number of visitors to our exhibition and decrease our liabilities, we made an arrangement with the Palace Company to reduce their claim for rent, upon condition of our throwing the gallery open free. Our exhibitors also subscribed towards the same end. The place was filled daily after the removal of the turnstiles, and when the adjudicators went round after all the French goods had arrived, there was but one opinion upon the show, and that was a favourable one. We were criticized upon the small number of our French contributions. But when we remember that, of the seventy whose articles arrived,—some half-dozen names represented large co-operative associations—such as the Tailors' Society, the Opticians', the Lampmakers', and the Carpenters', we find the number of French workmen actually represented equalled, if they did not exceed, that of the English. The principle, that French workmen are willing and anxious to fraternize with their English friends, I maintain was proved, and abundantly proved, by the trouble and expense incurred in sending even those seventy cases of goods to Sydenham. I will go further, and say that we owe them some return of confidence.

As another mode of lessening our expenditure, we countermanded an order which had been given for expensive bronze commemorative medals. 800 of them, however, were completed, so the committee were compelled to take them. The difficult task was then before us,—to divide these 800 medals among something like 1,300 claimants, for we had 1,200 English and 70 French exhibitors, and all had been promised a medal. After some discussion, we resolved to give them as follows: First, to all the ladies who had exhibited; next, to the French exhibitors and committee; and the rest, as far as they would go, to all who came to claim them personally,—preference being given to those who had subscribed towards the lessening of the committee's debt. As you may suppose, some of our exhibitors were very angry, and the task of apologizing for what seemed a breach of faith on the part of the committee I found an extremely unpleasant one. But I feel bound to thank the great majority for the kind manner in which our explanations were received. If our exhibition had been the greatest pecuniary success ever achieved, the *esprit-de-corps*, if I may use the term, of our exhibitors could not have been higher. Almost without an exception, they took the warmest interest in the enterprise, and I was flooded with letters conveying suggestions and advice, which, although they were sometimes, through their great number, a little tiresome to have to reply to, were extremely gratifying, as proofs of the good-will of the writers.

The prize certificates were awarded by a mixed committee of French and English gentlemen, connected in various ways with the arts and manufactures. The French exhibitors held our honourable mention in great esteem, and lists of the prize-holders were given in all the principal Parisian journals. The able correspondent of the *Daily Telegraph* mentioned this fact in one of his letters, and commented upon the great interest our proceedings had excited in Paris.

We closed our exhibition, without ceremony, in the beginning of November, and two hundred and fifteen of the exhibitors sat down to a dinner at the Freemasons'

Tavern on the 5th December, over which you, Sir, were again kind enough to preside. The proceedings passed off pleasantly, and a hope was expressed, in more than one quarter, and enthusiastically received, that we might all, on some future occasion, meet again.

The verdict of the speakers that evening was one in which I feel sure all who have followed our proceedings from the first would concur; that, straightened as we were for want of time and money, we did our best, and that, although the Anglo-French Skilled Work Exhibition was not commercially a success, it was, looked at from any other point of view, not a failure.

#### PROPOSAL FOR THE FORMATION OF AN "ANGLO-FRENCH ASSOCIATION."

Having told my story, I would respectfully ask to be allowed to point the moral. I think the feeling which is prevalent among those who have been connected with the Anglo-French Exhibition—either as exhibitors or on committees—is one of regret that the work which has been humbly carried on seems about to terminate for want of abler hands to take it up. If this noble Society, which exists for the encouragement of arts, commerce, and manufactures, could be induced to add, as it were, an Anglo-French wing to its plan of action, I feel certain that beneficial results would be attained, not only for the arts and commerce, but the peace and prosperity of the world. It will here be proper for me to state that nobody is at all compromised by my proposition. You, sir, are as innocent of it as any person in the room, and I come here to-night merely to make a suggestion for the consideration of the gentlemen over whom you preside. I would humbly venture to propose, then, that the experiment of binding together in closer union the workmen of France and Great Britain—begun in a corner, undertaken by nobodies, with neither means nor ability, against all sorts of odds—should now be taken completely out of their incompetent hands and carried to its conclusion by the Society of Arts.

The first question that of course occurs to one's mind is, "What has a Society for the Encouragement of Arts, Manufactures and Commerce, to do with bringing English and French workmen together?" That query I will, with your permission, assume to have been put, and proceed to answer it. To encourage arts, you must and do encourage art-workmen; to encourage commerce, you must and do look favourably upon the intercommunication of peoples. Now, upon these assumptions I shall attempt to prove my case. I believe last Wednesday a discussion was held in this room upon the very question of the best mode of encouraging art-workmen. I regret that a previous engagement prevented me from being present at so interesting an inquiry. But I believe, from conversations I have had with different gentlemen connected with the Society, that your experience, sir, has lately been that the encouragement has been chiefly on one side. You do all you can to encourage the workmen, but they do not give such a response as is calculated to very much encourage you. You offer prizes of great value—amounting, I am told, to sometimes as much as five or six hundred pounds in the aggregate—but, from various causes, the competition for them is not spirited. Now, I don't know whether any gentleman last Wednesday expressed what I am about to say, but I happen to know that several art-workmen think that one reason of the non-success in this branch of your operations is, that, for the present day, you are not sensational enough. There is a wish on the part of many to see you make a greater stir. They say that in consequence of things being done so quietly here, a prize from the Society of Arts is looked upon as a very good thing—for good young men. But, from the absence of the very highest class of workmen at some of your competitions, prizes have occasionally found their way into hands which, somehow or other, never manage to carry off many gold

medals on Saturday evenings. One notoriously unskilled workman gaining a prize does more to damage the *éclat* attending your distribution, and breeds more indifference to your inducements, than people unacquainted with the tone of art-workmen's society would suppose. The one sin never forgiven among any class of English workmen is want of skill in the particular art professed. "Incapables" are cruelly treated, and held in great contempt; and if one such carries off a prize by accident, the result is mischievous. Again, your show of the articles which are sent in is thought to be too private an affair. There are not so many painters in the country as art-workmen, and yet the Academy overflows every year with both quantity and quality. Why? Because the opening of the Royal Academy is an event: the world and his wife go there, and Brown, Jones, and Robinson feel that they will be "made men," if their productions are accepted and admired. There is a perfect fever of excitement among all *palette-able* people while the hanging committee are at their labours, and the furious denunciations against those gentlemen every year are an evidence of the intense interest felt in the Academy by those for whose encouragement it exists. On the other hand, although I have now for some years been among art-workmen in several branches, I have never yet heard a word spoken against you, sir, nor has anybody in my presence ever assailed the impartiality of the Secretary or any of the gentlemen connected with your Society. I say this is decidedly a bad sign. Why, even over our poor little exhibition we managed to enlist no end of hatred, and I say that was a good sign. Now I would respectfully suggest that there is no better method of encouraging the production of anything than by calling forth competition. It is all very well to say that art workmen are so fully employed that they have no time to compete. Make the carrying off your head-prize an object of ambition—as the Wimbledon medal is to volunteers—and men will find or make time to try for it. In a word, can you not make your competition international? and thus kill two birds with one stone—encourage arts and manufactures, and cement the friendship between the workmen of France and England. It is not for me to say what would be the proper steps to be taken. The work outgrew my capacity some time since, or I would not propose to relinquish it. But some measures should be taken at once. Can there be a grander work than peacemaking? Yes, sir, I venture to think there can, for the reaction of human nature makes it comparatively easy for people towards the close of a period of strife to come forward and preach its cessation. Blessed indeed are the peacemakers. But thrice blessed, in my opinion, are they who, without the incentive afforded by excitement, calmly devote their lives and energies to peace-preserving. Sir, if you induce your Council to promote the inter-communication of Frenchmen and Englishmen, you will be doing more towards the perpetuation of the alliance than any Cabinet minister can do by signing a treaty. The amity between governments can be ended by the stroke of a pen, or a word spoken across a green baize table. A breath can unmake them as a breath has made; but the friendship of two such peoples when they know one another and are intimate, could never—would never be broken. Charles Lamb said he never hated anybody whom he had seen, and we must all have felt that unaccountable hatred to strangers to which he alluded. Well, I firmly believe that a treaty duly entered into with—say the London Chatham and Dover Railway—of which the protocol is a little piece of coloured pasteboard, bearing the words "To Paris and back," is the best treaty in the world for increasing the respect and admiration of Englishmen for their lively and good-natured neighbours. I also think that the Frenchman does not like us less after a few days or weeks spent among us. It is an old assertion that we have much to learn from each other. But, old as it is, the truth must strike anew every intel-

ligent Briton who traverses the magnificent streets of Paris. We English are so apt to wrap ourselves in our own self-sufficiency. We say that a thing that is bad is un-English, one which is good is English. Now I would ask any man who has contrasted the light step, the frank gaiety of the French workman of the poorest quarters, with the awkward gravity, and almost melancholy appearance of too many of their social equals in this country, could we not borrow a French leaf or two in this respect? The Frenchman seems to get more enjoyment out of his life than the Englishman. He often *lives* under circumstances in which an Englishman would think it only incumbent upon him to *exist*. Surely, then, the science of life is a subject worthy of the study of all. The reason I placed my notice on the paper as a proposition for the formation of an Anglo-French Association, instead of putting it in the form of a petition to the Council of the Society of Arts, was because I am ignorant of the position of the Society. It is possible that some impassable barrier exists against every effort to encourage arts abroad or foreign artists; in that case I thought the Council might, perhaps, be induced to imitate the railway companies who wanted to sell coals, and finding themselves stopped by the Act, managed to start a separate association under another name, but with the management principally the same as in their own. I feel sure that an association for the special object of promoting the intercommunication of French and English people would do good. I feel equally sure that if once now and again an Anglo-French exhibition could be got together by the Society of Arts, the results would be satisfactory to that body. I may as well frankly state, as well on my own as my committee's behalf, that we have got to the end of our tether. We can do no more in it. At considerable personal inconvenience, at some expense and a great deal of annoyance, we have commenced a great international experiment. We have succeeded in proving the practicability of bringing French and English workmen together. To get together seventy French exhibitors, hurried, as they were, to make their goods, and representing, as some of them did, hundreds of willing contributors, was an achievement which nobody knows better the value of than the members of the Society of Arts. Now, sir, although we are anxious to have no more to do with the promotion of exhibitions, although we are tired of replying to thousands of letters, and dunning guarantors, will you, gentlemen of influence, who profess to encourage such movements, allow such an opportunity of obtaining the "good-will" of a great scheme for nothing, as the Americans say, to pass away?

Would not the present time, the date of completion of half a century of peace, be a good one to launch a society for the tightening of the bonds of amity? I think it would, sir. This next summer you might invite a number of French gentlemen and operatives to a congress in London to arrange a common ground of action. Next year is the year of the Exhibition in Paris. Take such measures as will almost compel every art-workman in this country to visit that great collection and the city in which it will stand. Depend upon it, any entertainment you might give French visitors next summer in London would be returned with interest, in 1867, to English visitors to Paris. And let the Anglo-French Association charge itself with keeping the friendly ball, thus set in motion, going. Let there be a succession of annually-recurring fêtes. Once a year let there be a dinner in London, to which French guests are invited, and in Paris I feel sure a breakfast would follow. Such an association should manage, if possible, to secure a place for English workmen in the 1867 Exhibition. Hold a preliminary exhibition of such works in London next winter, and at once announce that measures will be taken to enable everybody to visit Paris at rates unparalleled for their lowness. Let monster excursion trains start all through the time of the Exhibition as regularly as they will to

Bath or Portsmouth. Instead of "eight hours at the sea side," let the cry be "eight days with our friends the French." If your Council, sir, would make such a movement as I have suggested, part of the regular business, I believe they would thereby encourage arts, manufactures, and commerce; arts, by holding an exhibition at intervals of the highest productions of two most skilful nations, stimulated into active competition; commerce and manufactures, by making two civilized nations personally acquainted with the various means of supplying common wants possessed by their neighbours. We have in this country a Peace Society, and although it aims at the accomplishment of what I consider an impossibility, viz., universal peace, I feel sure that that association does great good, lifting its voice, as it never fails to do at all times when men's passions seem to be running away with their reason. I do not believe in universal peace. The throb of the drum and glorious pomp and circumstance of war strike a natural chord in every human bosom. I do not even believe that war is always a misfortune. Men must die, and there is something, to my mind, very grand in that solemn protest against the innate selfishness of our nature, which makes a man lay down his life for a principle; but be this as it may, I do believe in peace between Great Britain and France. I do so because I believe in the desirability of the progress of civilization and freedom. I do so because I think they have shed enough of each other's blood in times past at the bidding of senseless and selfish men. I do so because I believe the one to be the most polished and intellectual and the other the most honest and practical nation under the sun. No! I do not believe in universal peace while there are despots to be crushed and the downtrodden and oppressed to be upraised, any more than I believe in the possibility of my personally liking any man in the world whom I consider to be mean and despicable. But a close and abiding friendship can and often does exist between two individuals for their whole lives. They bear with each other's infirmities; they are particularly slow to anger, and always believe the best of each other; they respect one another more than any body else in the world, not because they think each other the *ne plus ultra* of excellence, but simply because they are "bosom friends," and never intend to be otherwise. Such a thing among individuals is common enough. I believe it could be the same between nations. Peace has existed for fifty years; but how many times has the lovely goddess shaken her wings during that period? Let the next half-century be one of real friendship, and at its close it would be as easy to get up a war between Surrey and Middlesex as between that land which happens to be on the south and that to the north of the St. George's Channel.

To the wealthy and public-spirited, then, we commend the future care of the little seed we have buried. If they will tend it we believe there will spring up a glorious tree. If so, good! If not we cannot help it. I would reiterate, in conclusion, that in my humble opinion the formation of an Anglo-French Association in close connection with the Society of Arts, for the promotion of amicable intercourse between members of the two foremost nations of Europe, would be an undertaking calculated to encourage the Arts, Commerce, and Manufactures of the world, inasmuch as the constant tendency of such a Society would be to preserve that peace and good-will so necessary to their highest development.

#### DISCUSSION.

The CHAIRMAN expressed a hope that those gentlemen who were about to enter upon the discussion of this paper would clearly recognise that there were two distinct subjects treated by Mr. Coningsby. The first part of the paper was a history of the Anglo-French Exhibition, held last year, and he (the chairman) would be glad to hear the opinions of those present as to the



reasons why the call was not more widely responded to, as well as suggestions by which the shortcomings of that exhibition might be remedied in any future undertaking of the kind. With regard to the second part of the paper, he would be glad to hear opinions as to the desirability of attempting to establish an Anglo-French Association, and as to the amount of support it would be likely to receive from the different classes of the community in the two countries.

Mr. WHITEING thought little remained to be added to what had already been said in the paper as to the causes of failure in last year's Exhibition. These, he believed to have been the fact of holding the Exhibition at the Crystal Palace, and the short time which the French artisans had to prepare for it. A very general wish was expressed to support that Exhibition, not only on the part of the workmen of France, but on that of the large manufacturers themselves; and the feeling was that they would rather not send their goods at all than send those which did not adequately represent the manufactures of that country. The French committee comprised people of various classes of society, including the editors of the *Siecle*, the *Revue des Deux Mondes*, &c., and the movement was very favourably received and supported by the Paris press generally. In France the union between the working classes and the thinking classes was more close than it was in this country; and he believed if a longer time had been afforded for the organisation of the late Exhibition, in addition to the co-operation of the leading men in French society, it would ultimately have obtained the patronage of the government itself.

Mr. BOTLEY considered that the want of success of the late Anglo-French exhibition did not arise so much from its being held at the Crystal Palace as from the portion of the building in which it was placed, namely, the gallery adjoining the Indian Court, being so little frequented by visitors. It was also possible that the extra charge for admission had something to do with the small number of visitors. If the admission had been by the purchase of a catalogue for a small sum, he believed a much larger number of people, and especially of the working classes, would have visited that exhibition. He was favourable to the formation of the proposed Anglo-French Association, which had been suggested by Mr. Coningsby, and was ready personally to co-operate in forwarding so desirable an object.

Mr. FIGGINS, jun., said it was easy to point out the causes of the failure of these industrial exhibitions, but it was not so easy to indicate the remedy. There were two difficulties to be overcome in getting up these exhibitions. The first was to induce the workmen to come forward, and the second was to make the exhibitions pay. He believed the best way to influence the workmen to respond to the appeal made to them was to interest their employers in the matter, and through them the workmen. He was himself a large employer of labour, and he believed half a dozen words from him to his men would go further than all the speeches and pamphlets that could be put before them. It was for the manufacturers to point out to those in their employment the directions on which their skill could be exercised with the greatest advantage to themselves. On the one hand the workmen wanted some incentive to contribute to these exhibitions; and, on the other hand, the manufacturers wanted something that would tend to the improvement of their productions, and enable them to meet the competition to which they were exposed. With regard to the second feature in the success of these exhibitions—the money return—he believed there would be no lack of it if a mutual interest between the manufacturer and the workman were created. He had himself bought a large number of tickets for the North London Exhibition, and had distributed a considerable portion of them gratuitously to his men; he thus created such an interest in the Exhibition that the rest of the tickets were gladly purchased by them. He thought if this had not been

done, few, if any, of the men would have visited that Exhibition. With regard to the policy of getting up another Anglo-French Exhibition, he thought they ought to have a better response in the case of their own exhibitions before they invited the artisans of other countries to join in them.

Mr. PETER GRAHAM, referring to the latter part of the paper, would point out some of the practical difficulties which he considered stood in the way of achieving the objects which the author had in view. In the first place he would refer to the local working men's exhibitions that had already taken place in London, particularly the North London, as one of the first of those undertakings. The success that attended that exhibition in respect of the number of persons who visited it, as well as the satisfactory pecuniary results of the experiment, led to many other exhibitions of the same character in London. For his own part he thought there was scarcely anything in that exhibition which was really worth going to see, and he believed the musical entertainments by which it was enlivened formed the main attraction to the greater number of visitors, and that the receipts would have been nearly as great if there had been no exhibition at all. The West London Exhibition, although the objects exhibited were of far greater merit than those at the North London, was a commercial failure, mainly, he believed, because the managers were prevented by the landlord of the Floral Hall from giving musical entertainments. In that case the guarantors had to meet a deficiency of about £1,500, although, as he had just said, the exhibition was far superior to the North London, which was a pecuniary success, thus proving, to his mind, that it was not the exhibition alone, but the accompanying attractions, which induced people to pay their money to go to it. His own opinion was that exhibitions of the kind recommended in the paper this evening would have little or no influence upon the art-workmanship of the two countries. Moreover, there were comparatively few articles of importance which were the actual production of one hand, the association of different workmen in various departments being generally required. For instance, a piece of cabinet furniture, if it was ornamented with metal or porcelain, would require ten or twelve different classes of workmen to complete it, and the credit of the production as a whole did not belong to any one individual. On the subject of international exhibitions generally, he thought if they were held alternately every five years in London and Paris that was quite often enough; any shorter interval than that was, he believed, insufficient to mark the progress which had taken place since the previous exhibition. International exhibitions, on the scale on which they had hitherto taken place, were a great tax upon the time, thought, and capital of large manufacturers, and they should certainly not be held too often, or they would not obtain the support of the large manufacturers of the different countries.

Mr. LAVANCHY fully endorsed the views of Mr. Graham as to the desirability of a sufficient interval of time being allowed between each exhibition to mark the progress made in arts and manufactures; if exhibitions were held too frequently their interest and value were lost. On the subject of promoting good fellowship and union between the working classes of this country and those of France, he could only say that anything which tended to promote so desirable an object should have his most cordial support and co-operation.

Mr. DONNECAULT expressed the pleasure he felt in again meeting Mr. Coningsby, with whom on previous occasions he had often disagreed. He was happy to say he concurred in most of what had fallen from that gentleman this evening. With regard to the first portion of the paper, however, he would say that having had considerable personal experience in the struggles and difficulties of those who took part in industrial exhibitions, he did not agree with the remarks that had been made tending to show that a reluctance existed on the



part of the working classes themselves to come forward in this movement. The South-East of London Exhibition, which had just been closed, was visited by upwards of 100,000 people, the major part of whom belonged to the working classes; and he was happy to say that the large manufacturers of that district gave their warm support to that exhibition. He did not agree with Mr. Coningsby when he spoke of the reluctance of the committee to receive the patronage of those about them. He thought a proper kind of patronage, like mercy, blessed both the giver and receiver; he did not mean an offensive kind of patronage, but the hearty co-operation of men of influence and position might, in his opinion, be received without any loss of self-respect. With regard to the second part of the paper, he would express a hope that this Society would give its aid in the formation of the proposed Anglo-French Association, in order that the alliance which had been promoted between the hitherto rival nations might not be merely of a political and diplomatic character, but might be founded upon and cemented by the cordial good fellowship of the people of the two countries, which would be best secured and perpetuated by mutual association for advancing the interests of arts and manufactures.

Rev. Dr. EMERTON expressed his general concurrence with the views enunciated in the paper, and hoped the influence of this Society would be given in aiding the formation of the proposed Anglo-French Association, as the best means of promoting the true interests of both nations. He referred to some former efforts of his own in furtherance of this object.

Mr. WEBBER thought that the appeal that was now made for the co-operation of the Society in this matter amounted to a request to take up that which, having been tried by others, had resulted in failure. If he were asked why these industrial exhibitions had not been attended with greater success, he believed it was in a great measure owing to the fact that the public were beginning to see that such exhibitions were too much made the means of advancing private trade interests, in fact, had too much of the advertising element in them. He agreed with Mr. Graham that the too great frequency of international exhibitions detracted from their value. He considered, moreover, that these great exhibitions were deprived of much of their charm by the frequent exhibitions on the small scale which were now so much in fashion. With regard to giving facilities for the working classes of this country visiting the next Paris Exhibition, he thought the railway companies might be safely left to carry this out in their own way; they would be sufficiently alive to their own interests to promote that object to the utmost of their power.

Sir THOMAS PHILLIPS said he had not intended to address the meeting, as he had very little knowledge on the subject of exhibitions, and therefore could not contribute to their instruction on that part of the question; but he rose principally for the purpose of expressing his gratification at the great ability which Mr. Coningsby had displayed in the paper. Whatever conclusions they might come to as to the practical value of the suggestions he had offered, they would all feel as strongly as he did the desirability of union and intercommunication between the people of France and England. He confessed he had some doubts as to the policy of too frequent exhibitions of works of industry. The great object was that the workmen of each country should have the best means of knowing what each was doing, but he could not help thinking that this object would be best effected by the rare rather than by the too frequent recurrence of these international gatherings. He wished, also, to express his own private opinion with regard to the suggestion that had been made that this Society should take up and carry on the movement which had been organised under the circumstances narrated to them this evening. He confessed he thought, at present, it was a matter which the Society could not wisely undertake, nor was it one that came fairly within the

scope of its objects. He felt it involved so many important questions, and entailed so large a share of responsibility, that he extremely doubted whether it was desirable to form any such association as had been suggested. It was to be remembered that these proposed efforts pointed to one particular country, and they might be asked—"If France, why not Italy, Austria, and Belgium?" All that had hitherto been done in this direction had been international in its widest sense, and why should we enter into preferential arrangements with one particular country? It was open to those connected with French interests and commerce to say they desired to form an association limited to that particular country, but he could not help thinking it would not be wise for the Society of Arts, occupying the position it did, to take up the question from this limited point of view.

Mr. GALLOWAY held that the improvement of the arts and sciences constituted the wealth of every nation, and was at the bottom of all social and moral well-being. If that was a truism, surely everything that tended to that end ought to be supported to the fullest extent by this Society. He could not conceive why there should be the least objection raised to a greater number of working men's exhibitions, and why they should not be extended as widely as possible. On the subject of the pecuniary losses which had attended some of the local exhibitions, he would say that a trifling pecuniary loss was not to be put in comparison with the benefit those exhibitions were calculated to confer, especially upon the youth of the country who were being trained in the various branches of our national industry. From that point of view alone, industrial exhibitions ought to be encouraged, and they should, in his opinion, be as frequent as possible. For his own part, he thought that once a year would not be too often.

Mr. G. F. WILSON, F.R.S., said he quite felt the difficulty of making these industrial exhibitions peculiarly successful, and agreed with the speaker who advocated the necessity of obtaining the co-operation of the employers of labour, whose assistance would be most valuable. He also concurred in what had fallen from Mr. Graham as to the undesirability of too frequent international exhibitions; but he must take exception to that gentleman's criticism upon the objects exhibited at the North London Exhibition. He (Mr. Wilson) would say that, though probably his attention was most directed to other objects than those which would engage the notice of Mr. Graham, there were many works there which struck him as being as interesting as any he had ever seen at any exhibition whatever. With regard to the promotion of the friendly intercourse with France which Mr. Coningsby had advocated, he was afraid that to whatever extent the working classes of this country visited the forthcoming exhibition at Paris, there was no chance of their acquiring the light step and vivacious air of the French artizan, which were mainly the results of the influences of climate and race, and could not be acquired.

After some observations from Mr. STOTHARD upon the various institutions which were devoted to the advancement of arts and manufactures in this country,

The CHAIRMAN said that some of the speakers had rather misunderstood Mr. Coningsby, who did not seem, in his paper, to advocate special Anglo-French art workmanship exhibitions, but that they should endeavour to obtain space at the Paris Exhibition of 1867 in which the English and French workmen could exhibit the best specimens of their art in juxtaposition. He entirely agreed with the observation of Mr. Graham, that it was rarely the case that any work of artistic skill could be exhibited as the production of any individual workman, but only as the result of the efforts of several. This objection, however, could be got over by giving the names of all the men who were engaged on the work and stating the part that each took in its production. He did not agree with his friend, Sir Thomas Phillips, in the view he had taken of the duty of the

Society in this matter. His own feeling was that there was a great opportunity before them of bringing the English workman, under favourable circumstances, into contact with the French workman, which he thought should not be lost. Mr. Coningsby had told them that efforts had been made by the artisans themselves to get up an Anglo-French Exhibition, but that, although it had not been a great failure, still they had not the time or the funds to make it a great success. That gentleman now asked the Society to give the influence of its position, and, to some extent, perhaps, the aid of its funds in making another experiment of a somewhat similar kind under the most favourable circumstances, in the Paris Exhibition of 1867. He (the chairman) could not help thinking that if this subject was put properly before the public there would be a considerable response, and he thought that a Society for the Encouragement of Arts, Manufactures, and Commerce could not but feel deep interest in a subject which had been so warmly taken up by the working classes themselves, who should be encouraged rather than checked in their endeavours to promote international good feeling and friendly rivalry between the artisans of the two countries. Allusion had been made to the contrast which was presented between the English and French workman. His friend Mr. Wilson had very correctly attributed that in a great measure to the influences of climate and race. People who could live half their time out of doors naturally acquired a gayer and more sprightly air than those who lived under opposite influences; but if we were wanting in the gaiety of our neighbours this was compensated for by the solid and sterling qualities of our national character, which produced far greater results than the gaiety and good humour of the French. Still he acknowledged the attractiveness of French society, and he believed our workmen as well as those above them would reap advantage from association with others of a more light-hearted and gayer character than their own. Reference had been made to some steps that had been taken with regard to the Paris Exhibition of 1867. When he was told that Mr. Coningsby was about to bring this paper forward, he (the Chairman) made application for space in that exhibition for the display of Anglo-French art-workmanship, but he found there was a difficulty, in an exhibition of that magnitude, in making the arrangement which he had hoped for, viz., that the English and French workmanship should be placed side by side, in order that the comparative merits of each might be appreciated. He found this could not be carried out, as it was necessary that the productions of each country should be exhibited in the regular order of classification. They had been told by one speaker that it was desirable in all these matters that the master should co-operate with his workmen, and there was no doubt that masters might materially assist their workmen if they allowed them to exhibit work which was produced in the ordinary way of business, for it was, perhaps, too much to ask a workman, after the usual hours of daily labour, to expend a further amount of time and skill upon some special article, for the purpose of exhibition. He agreed, therefore, in the importance of securing the concurrence and co-operation of the employers; and he believed it was to the absence of that co-operation that the failure of some of the exhibitions that had already taken place might be mainly attributed. With regard to the question as to how far the Society of Arts could aid them in this matter of the proposed Anglo-French association, he thought the question ought to receive their most careful and anxious consideration; but whatever his own views might be, in this as in all other matters, the course which this Society would be recommended to take, would necessarily be decided by a majority of those to whom it had entrusted the conduct of its affairs. He concluded by moving a cordial vote of thanks to Mr. Coningsby for his most able and interesting paper.

The vote of thanks was then passed.

Mr. CONINGSBY, in acknowledging the compliment paid him, said several speakers had fallen into the mistake that the object of the paper was to show the advantages of industrial exhibitions, whereas his main purpose was to endeavour to induce the Society of Arts to take up the movement, which had been commenced in the way that he had stated, by promoting intercommunication between the workmen of England and France. He denied that the late Anglo-French Exhibition had been a failure. It was true it had not been pecuniarily successful, but the object was not to make money, but to bring the workmen of the two countries together in friendly rivalry, and in this, he maintained, they had been successful. Looking to the fact that with upwards of £600 offered in prizes by this influential Society last year, only about sixty persons competed for them, and that there were no less than seventy French exhibitors at the Anglo-French Exhibition, which was got up by persons of no influence at all, with nothing to compete for except fame, he thought the experiment that had been made was anything but a failure.

#### CITY OF LONDON INDUSTRIAL EXHIBITION.

This Exhibition was formally opened by the Lord Mayor, at the Guildhall, on Tuesday last, in the presence of the chief civic dignitaries and a large assembly.

During the arrival of the company the band of the London Rifle Brigade performed a selection of music, and a numerous choir subsequently sang the "Sanctus" and 100th Psalm. The Rev. M. Gibbs (the Lord Mayor's chaplain) then offered prayer, which was followed by the chorus—"The heavens are telling." Mr. W. W. Head, chairman of the committee, read an address with reference to the organisation of the Exhibition; and the Secretary read a report, from which it appears that the Industrial Exhibition originated with a few working men, who, having visited various exhibitions of a similar nature, held in other parts of the metropolis, conceived the idea that it was but just to the artisans of the City of London that the same opportunity of displaying their industry and skill should be afforded to them. Meetings were held from time to time, until eventually the project was sufficiently matured to justify the promoters in bringing it before the public. In July last year a requisition to the late Lord Mayor, inviting his patronage and co-operation, was signed in the space of a few days by upwards of 2,000 working men. A large public meeting was held soon after in Sussex Hall, Leadenhall-street, over which his lordship presided. On this occasion resolutions promising sympathy and support were cordially adopted, and the provisional committee was rendered permanent. Some of the first merchants of the metropolis became guarantors, many others following their example, so that a fund—which commenced with the shilling of the artisan—was speedily augmented to the amount of £3,384 6s. 6d. That entirely relieved the committee from all anxiety as to the pecuniary results of the undertaking. The use of the Guildhall was granted by the Court of Common Council. It is the design of the promoters to make the City of London Working Classes' Industrial Exhibition more beneficial and permanent in its results than any of its predecessors, for it is intended to perpetuate the memory of this latest effort by the foundation of a Public Free Library in the City.

The Lord Mayor then delivered an address; and subsequently a concert took place, in which many eminent *artistes* appeared.

The exhibition has been classified as follows:—Architectural models and designs and drawings; books and bookbinding; curiosities; carvings and turnings in wood and other materials; drawings in crayon and pencil, water-colours, and pen and ink; engravings on wood, metal, &c.; artificial flowers, feathers, and hair;

frames, decorative furniture, and cabinet-work; grain-ing, marbling, and paper-hanging; glass-work for decorative purposes, and cut glass; heraldry, illustrations, inventions for promoting domestic economy, inventions for protecting life by sea, rail, and road; iron and hardware, masonic and other jewellery, leather work (various) and boots and shoes; ladies' work and millinery; medical and surgical instruments; modelling in marble, plaster, and bronze, mechanism (working models), sewing machines, musical instruments, naval architecture, paintings in oil, photography, scientific instruments; stuffed birds, insects, &c., tailoring, wirework wathes and chronometers, and miscellaneous.

The Prize Works at the recent Art-Workmanship Competition of the Society of Arts have been lent by the Council for exhibition on this occasion.

### HISTORY OF THE BRITISH MUSEUM.

Mr. Gregory is to bring the British Museum again to the notice of the House of Commons next week, and as the readers of the *Journal* may consider it opportune to be reminded of its history, the following account is extracted from the last number of the *Edinburgh Review* :—

How the British Museum originated, we venture to think is now little known, and it will surprise many, even perhaps Dr. Longley, Lord Cranworth, and Mr. Denison themselves, to be told that their predecessors, the Archbishop of Canterbury, the Lord Chancellor, and the Speaker of the House of Commons, were appointed trustees of a public lottery for raising the necessary funds to start the British Museum, in the year 1753, when it was deemed expedient to nominate the highest dignitaries in the kingdom as the chosen instruments for accomplishing what now would be regarded as illegal and immoral. Although Parliament, of late years, with doubtful policy, has sanctioned art union lotteries for circulating works of art, public feeling now would never entertain the idea of founding a National Museum of Science and Art with the profits of a lottery, and certainly no Archbishop, or Lord Chancellor, or Speaker, would be invited to superintend the management of it.

In the year above-mentioned Sir Hans Sloane, Bart., was a very old physician, who lived in the Manor House near to old Chelsea Church, where his monument—an urn embraced by serpents—erected to his memory by his daughters, may still be seen. He was the President of the College of Physicians, and founder of the Apothecaries' Gardens, where the cedars made so fine a feature in the landscape at Chelsea Reach, and he gave his names to "Sloane-street" and the adjacent little square called "Hans-place." Sir Hans Sloane bought this house from Lord Cheyne, and it was bequeathed by him to Lord Cadogan, who married his daughter, and in this house, —to employ the words of the black letter Act of Parliament (26 George II. cap. 22), the same which legalised the lottery—he had, "through the course of many years, with great labour and expense, gathered together whatever could be procured, either in our own or foreign countries, that was rare and curious," at a cost, it is said, of £50,000. In 1749 he had made a codicil to his will, in which he expressed a desire that his collection, in all its branches, "might be, if it were possible, kept and preserved together, whole and entire, in his Manor House, in the parish of Chelsea," *i.e.*, half a mile further west from Charing-cross than the site where it has been proposed to locate his Natural History Collections. The collection, or "Museum," as it is called, consisted of "his library of books, drawings, manuscripts, prints, medals and coins, ancient and modern, antiquities, seals, cameos, and intaglios, precious stones, agates, jaspers, vessels of agate and jasper, chrystals, mathematical instruments, drawings, and pictures, more particularly described and numbered, with short histories or accounts of them, with proper references in certain catalogues by him made, containing thirty-eight volumes in folio and eight

volumes in quarto." We beg our readers to note the precise method of cataloguing, which, as will appear hereafter, has been altogether superseded by the trustees. He appointed trustees to sell his collection for £20,000,—also "to obtain a sufficient fund or provision for maintaining and taking care of his said collection and premises, and for repairing and supporting his said Manor House Waterworks coming from Kensington, and premises." His trustees were, in the first instance, to apply to Parliament, and, if Parliament declined the offer, they were to sell it, for the use of certain foreign academies, which were named; and in case the said offer should not be accepted by either of the said foreign academies, his executors were at liberty to sell it "with all convenient, speedy, and advantageous manner." The Act of Parliament which was passed to sanction the purchase of this collection for the nation is still the basis of the constitution of the British Museum. The trustees of that institution then first received their powers and title from Parliament. The office of "Principal Librarian" was then created with the powers and the salary of £1,000 a year, which he retains to this day. The Archbishop of Canterbury, the Lord Chancellor, and the Speaker were invested with the patronage and control of this establishment; and for 113 years this strange constitution has not undergone any material alteration or improvement. The first act of the trustees appears to have been to waive the condition of the site and to consent to the removal of the Museum from the Manor House at Chelsea to any proper place, "so as the said collection be preserved entire without the least diminution or separation, and be kept for the use and benefit of the public, with free access to view and peruse the same at all stated and convenient seasons." For the Act provided that the collections should only remain there until a general repository should be provided for the same, after which the Manor House of Chelsea was to follow the general disposition of Sir Hans Sloane's landed estate. The preamble of this statute ran in the following terms:—"Whereas the said Museum or Collection of Sir Hans Sloane is of much greater intrinsic value than the sum of twenty thousand pounds: and whereas all arts and sciences have a connection with each other, and discoveries in natural philosophy and other branches of speculative knowledge for the advancement and improvement whereof the said Museum or Collection was intended, do in many instances give help and success to the most useful experiments and inventions: Therefore, to the end that the said Museum or Collection may be preserved and maintained, not only for the inspection and entertainment of the learned and curious, but for the general use and benefit of the public," Parliament covenanted to pay for it the sum of £20,000 to his trustees, and the Act we have already described became the law of the land.

But this Act did much more. Powers were obtained to remove to a general repository the Cotton MSS. still remaining "at Cotton House, in Westminster, in a narrow little room, damp and improper for preserving the books and papers in danger of perishing, and not made sufficiently useful to British subjects and all learned foreigners;" also to purchase the Harleian Collection of MSS. for £10,000, to be placed in the same repository with the Cottonian Library. The Act created about forty trustees for these several collections, and incorporated them by the name of "the Trustees of the British Museum," and gave powers to provide a general repository, in which "the said Museum or Collection of Sir Hans Sloane, in all its branches, shall be kept and preserved together in the said general repository, whole and entire, and with proper marks of distinction, and to which free access to the said general repository, and to the collections therein contained, shall be given to all studious and curious persons at such times and in such manner as the trustees shall appoint." The Act also legalised the lottery to raise £300,000 for these purposes. There were to be

100,000 tickets of £3 each, of which 4,159 were to be "fortunate tickets," giving prizes as follows:—1 of £10,000, 1 of £5,000, 2 of £2,000, 10 of £1,000, 15 of £500, 130 of £100, 1,000 of £20, and 3,000 of £10, or a total of £99,000. The Archbishop, the Lord Chancellor, and the Speaker were appointed the managers to see fair play, and the lottery was drawn in Guildhall on the 26th November, 1753, wagers on the chances of the drawing of tickets being specially prohibited.

Thus things "rare and curious" constituted Sloane's Museum, for the use of "studious and curious persons." The objects enumerated are as miscellaneous in character as the contents of the old curiosity shop of some small provincial town. Is there to be found at this time one and the same collector hungry for "chrystals, mathematical instruments, drawings, and pictures?" This original vagueness and multiplicity still haunt the British Museum. While commerce has found it convenient and useful to separate the dealers in books from those in prints, and keep medallists and picture-dealers, and mathematical instrument makers apart, the British Museum Trustees look with horror on any one that shall divide their heterogeneous collections, although they themselves have violated all the conditions of Sir Hans Sloane's will, and separated his "mathematical instruments" from "chrystals, drawings, and pictures!" In a volume in the Sloane MSS. several versions of a plan or proposal for managing the collection are given in detail. It was to be divided into "1° books, prints, drawings, pictures, medals, and the most valuable of the jewels; 2° MSS.; 3° natural and artificial curiosities," which were assigned to different rooms in old Montague House. "Thus the whole collection will be kept together without the other collections interfering." Does Lord Derby, who is one of the Sloane Trustees, know that the whole collection, in spite of Act of Parliament, codicil, and trust deeds, is all dispersed? Not even the thirty-seven catalogues are kept together! Or have the trustees given due effect to the following injunction of the testator "to prevent as much as possible persons of mean and low degree and rude and ill-behaviour from intruding on such who were designed to have free access to the repositories for the sake of learning or curiosity, tending to the advancement and improvement of natural philosophy and other branches of speculative knowledge?"

Pursuing the history of the British Museum, we find that in the year following the passing of this Act, it was proved to be difficult, if not impossible, to get the Archbishop, the Lord Chancellor, and Speaker to meet, and so Parliament passed one of its curious hotch-pot Acts, "for punishing persons destroying turnpike locks," and "making Acts for erecting courts of conscience publick Acts," and "preventing persons driving certain carriages from riding on such carriages," and in it gave powers to render the presence of two of these high functionaries as valid as three, and made seven of the trustees as good as forty.

For fifty years the Museum slumbered on, spending about £2,500 a-year on management, and a few hundreds a-year on purchases, chiefly books and antiquities; but, in 1805, an Act (45 George III. cap. 127) was passed to purchase the Towneley Collection of ancient marbles for the sum of £20,000, to be open to the "inspection of artists and the curious in the fine arts," on condition that the whole of the said collection should be kept together, and Edward Towneley Standish, of whom the purchase was made, or of his heir or nominees, was made a trustee of the property sold.

In 1816 another great acquisition was made. The invaluable Elgin Collection of marbles and sculptures was purchased by a vote of £35,000, and here again the vendors, Lord Elgin and his successors, were added to the trustees, again increasing the number. This appears to be the last purchase which was accompanied by the creation of a trustee to protect the property he had sold. From the foundation of the British Museum to this period, about £120,000 had been expended on purchases,

chiefly consisting of books, MSS., and antiquities. Natural history was hardly recognised by the trustees, for only about £2,500 had been spent upon it. Nothing had been expended for minerals and fossils, or zoology, or botany, or prints and drawings. After that year, some slight purchases were made for objects in these classes, but it was not until after Mr. Hawes' Committee of the House of Commons, in 1835-6, that funds have been systematically devoted to procuring objects of science.

At this time, Parliament having been reformed, public interest began to manifest itself, through Parliament, in the management of the British Museum, which has gone on increasing to the present time. In 1835 and the following year an inquiry was made into the state of the British Museum, which presented ponderous blue-books to the House. The effect of these reports was to cause a largely-increased expenditure, both for salaries and purchases, in the several neglected departments, but these committees did not give greater distinctness to the object of the institution than Sir Hans Sloane's of "rare and curious," and they failed to point out that the origin of all defects in the institution was to be found in its irresponsible management by numerous trustees.

A second Select Committee sat, and in 1847 a Royal commission of inquiry was appointed, and a supplementary commission "for considering various and grave subjects" was added in 1848.

In 1859 Mr. Gregory obtained another committee, which directed its inquiries into the state of the British Museum as being in "hopeless confusion, valuable collections wholly hidden from the public, and great portions of others in danger of being destroyed by damp and neglect," a state which Mr. Gregory assured the House, in 1865, had not been remedied.

A decisive definition must be made of the scope and objects of the Museum. The old loose tradition of "rare and curious," and "rarities and curiosities," can no longer be accepted as the vague object of the principal repository of our national collections. The very idea of such a centralisation as now exists is averse to all progress. The Royal Society and the Society of Arts were very good and sufficient institutions a century ago; but these societies no longer monopolise all the subdivisions of human intelligence in science and art, and they have given birth to a numerous progeny of other societies. Nor can the British Museum do so without falling altogether behind the times. As well might the human race have been confined to the Garden of Eden, as well might England forbid emigration to the colonies, as that all that is "rare and curious"—which is now interpreted to mean all objects illustrating all the arts and sciences—should be confined within the narrow walls of Bloomsbury or any single spot. Since the period when the "few rare and curious things" were first assembled in old Montague-house, the Zoological Gardens and Kew Gardens have been made the living representatives of zoology and botany. The Geological Museum has taken charge of geology, if not of mineralogy. The Museum of the Commissioners of Patents and the Institution of Civil Engineers have appropriated objects of mechanical science and Sir Hans Sloane's mathematical instruments. The South Kensington Museum is devoted to illustrate the application of the fine arts to works of industry. The Ethnological Society and the Crystal Palace have assumed the charge of showing the history of mankind. A National Gallery for Pictures and a National Portrait Gallery have been created. The India Office has founded a museum for works of Eastern origin. The Institution of British Architects, the Architectural Museum, and other architectural societies have their collections of objects of architectural art. In fact, every class of objects which the British Museum has collected as "rare and curious," is now studied from a distinct and scientific point of view by numerous independent associations which had

no existence when the Museum was founded. No conceivable extent of space would enable the British Museum adequately to house and represent all desirable objects of science and art for all time. As science and art extend, so is the tendency to sub-divide, classify, and re-arrange their boundaries, and it is adverse to all scientific development to insist upon principles of concentration and limitation accidental to their origin and antagonistic to all progression. If the nation desires to have collections worthy of it, the present collections of the British Museum should be forthwith divided into the following distinct branches, each sufficiently enlarged:—

1. Books and MSS.
2. Pictures and drawings.
3. Antiquities; including vases and coins.
4. Zoology, and perhaps Mineralogy together.
5. Botany.
6. Ethnology.
7. Mechanical Science, with Mathematical Instruments, and the like.

Not only would the development of each division be promoted by separation under a proper executive management, but the utility of the collections would be greatly increased. They would be vastly more useful even to the few chosen scientific persons that use them, and a hundred times more used by the public at large. The connection of the objects with the library, always put forward as necessary, cannot be logically maintained, and is only a pretence.

Moreover there is a metropolitan view of the local position of such collections which must not be overlooked. Although the collections are national, being made for the use of the nation at large, and not for the metropolis only, still the metropolis, with its three millions of population, being a seventh of the whole country, has peculiar claims to have its convenience consulted. However theoretically central the British Museum may appear on the map, it is gradually ceasing to be convenient of access to the greatest numbers. It matters little to those who seriously study the collections where they are placed,\* but to the public at large it is important that the respective collections should be distributed in different sections of the metropolitan district where they can be seen most conveniently by the greatest numbers, and opportunity will be afforded to these greatest numbers by the railways which will encircle London in two years. Places on these lines will be within reach by trains starting every five minutes, and there is no doubt that if the Natural History Collection were transferred to the Regent's-park, the Ethnological Collections to the Victoria-park, the portraits sent to the National Portrait Gallery in the south of London, and the mediæval antiquities to South Kensington, these objects would afford instruction and pleasure to thousands, rather than to hundreds only in Bloomsbury. The drawings of the old masters should be transferred to the National Gallery when we have one worthy of the name. The library and sculpture galleries, with the vases, coins, and other antiques, would then appropriately occupy and fill the present edifice with one of the noblest collections in the world.

#### PARIS UNIVERSAL EXHIBITION OF 1867.

M. Duruy, the energetic Minister of Public Instruction, has defined what he proposes to do in order to carry out the intention, declared some time since, of including in the French department of the coming Universal Exhibition the products of intellect as well as those of industry. In a letter addressed to M. Le Play,

\* When the School of Design was at Somerset House, which is a perfectly central situation, the fees paid by the students averaged only £300 a year; now, at South Kensington, apparently a less eligible site, they produce £2,000; but the schools have been immensely improved in every respect.

Commissaire-Général of the Exhibition, the Minister says:—"It is not intended to compile an encyclopædic *résumé* of human knowledge, or even to write a complete history, but a review of the progress of intellectual culture during the last twenty years." And he then proceeds to give the programme of the reports to be drawn up for the Exhibition by scientific men, on their own responsibility, but under the sanction of the government, under the three following heads:—1st. Progress accomplished in the mathematical, physical, and natural sciences, to include geometry, analysis, mechanics, astronomy, and geodesy; physics and chemistry; geology and palæontology, botany, zoology, anthropology, general physiology, medicine and surgery, sanitary science, rural economy, and the veterinary art. 2nd. Progress accomplished in the moral and political sciences in their relation with the wants of society, including public rights, administrative rights, civil and penal legislation, political economy, and the rights of individuals. 3rd. Character and tendencies of French literature: comprising *belles lettres*, poetry, the theatre; philosophical doctrines; historical labours; archæological discoveries. To this collection of reports, adds the minister, will be attached, as a natural appendix, a collection of objects chosen with the view of illustrating, in the most interesting manner, the results of scientific missions and of archæological researches carried on during the same period under the auspices of the Ministry of Public Instruction. M. Duruy repeats the hope expressed in his first announcement that other countries will do the same as France proposes to do for the exhibition of the results of their mental and moral progress.

The Imperial Commission has published a list of the foreign commissioners appointed to the Exhibition, and the names that appear therein show the growing interest which is taken abroad in such matters; the Austrian Commission is headed by an Archduke; the Belgian has for President the Comte de Flandre, in place of his brother, now Leopold II.; the Portuguese has the father of the king at its head; the Prussian, the Prince Royal; Sweden and Norway, Prince Oscar; and England, as is well known, the Prince of Wales. Amongst other facts may be noted the appointment of Midzou Hyoumino Kami, Daimio and President of the Council of Gorodjos, at Jeddo, as chief of the Japanese Commission, and of M. Gréhan, consul for Siam at Paris, as president for that country. China, Morocco, Peru, and Persia are represented by residents in France, appointed, in the first place, by the French Imperial Commission, and in the others by the native authorities.

Russia, which in consequence of the war in the Crimea, did not take part in the Paris Exhibition of 1855, seems likely to be well represented; special committees have been appointed to receive the contributions of exhibitors at St. Petersburg, Moscow, Riga, Helsingfors, Warsaw, Kharkoff, Odessa, Tiflis, Orenburg, Ormsk, and Irkotsk, and the government defrays all charges between these places and Paris. As regards works of art, the Russian Commission requires that they shall be sent to the Academy of St. Petersburg before the 1st of September; they will there be exhibited specially, and will only be sent to Paris after the approval of the council of the academy.

The Imperial commission has adopted the suggestion of including retrospective art in the Exhibition of 1867, not separately, as proposed, but as an intrinsic portion of the contents of the building in the *Champ de Mars*, in the words of the Ministerial announcement:—"The gallery of the history of labour will receive objects produced in the various countries from the earliest periods to the end of the eighteenth century." The contributions of the various nations will, as in all the other classes, be arranged separately, and in connection with the other articles exhibited by the same country, and will at the same time be found in their places in the class to which they belong; there will thus be a zone or oval gallery devoted to antique carving, another to porcelain,

a third to glass, a fourth to enamels, a fifth to furniture, and so on, each geographically and chronologically arranged. A special sub-commission is appointed to carry out the object in view with respect to France, and its composition promises success. Count Nieuwerkerke, superintendent of the Beaux Arts, is appointed president, and Count de Laborde, the keeper of the Imperial Archives, M. de Longpérier, conservator of the antiquities in the Louvre, and M. du Sommerard, the director of the Museum of the Thermes and the Hôtel de Cluny, all members of the Imperial Commission, which has the charge of the historic monuments of the empire, together with M. Lartet and Baron Alphonse de Rothschild, are the other members. The commission is empowered to appoint special committees to carry out the work. Foreign commissions are invited to aid in the completion of this retrospective gallery. One of the first duties of the new commission will be to draw up a scheme of the products which will best represent the industry of France at various epochs.

The members of the Scientific Commission, whose duty it will be to report on the various departments of literature and art, are being named; M. de Quatrefages de Bréau, Pruner Bey, formerly physician to the Viceroy of Egypt, and M. Lartet are appointed in the section of anthropological and ethnological history. The report is to be submitted to the Imperial Commission before July, 1867.

The Imperial Commission has finally decided on accepting the propositions made respecting the introduction of various national recreations, including, amongst other things, music, dramatic performances, and popular entertainments. An International Club is another feature recently decided upon, and in connection with it a kind of arcade for the supply of all the wants of travellers. Lastly, the Commission announces that it is about to adjudicate respecting the restaurants, cafés, pastrycooks' shops, and other places for the sale of articles of food and drink, which will occupy a gallery surrounding the Exhibition building. Each exhibiting nation will have a portion of this gallery, and, says the commission "will then have the opportunity of making known the viands, drinks, and the various arrangements which apply to them: but each will be strictly confined to its national character." The contractors will have to pay a fixed rent per square metre, and to find everything for themselves but mere walls. Below the restaurants and other establishments will be a range of cellars let on like conditions.

The following document, dated 1st January, 1866, has been issued by the Imperial Commission —

LIST OF THE ESTABLISHMENTS WHICH FRENCH EXHIBITORS INTEND TO PLACE IN THE PARK.

Among the arrangements of the Universal Exhibition of 1867, which will be specially useful and attractive, may be mentioned the agricultural and industrial establishments which French producers desire to exhibit in the park of (30 hectares) 74 acres, situate around the Palace. The following is a list of those establishments or industries, which will be particularly interesting as showing processes, many of them new, and also on account of the life and movement which they will impart to the Exhibition:—

Treatment of silver-lead ore, and testing of lead.  
Preparation of zinc ore, with a novel apparatus for the condensation of the metallic vapours.  
Drawing of iron and lead pipes.  
Manufacture of white metal (white zinc).  
Manufacture of sodium.  
Foundries for bronzes and ornamental castings.  
Forge for scrap-iron.  
Manufacture of tin by a new process.  
Glass-works, with the furnaces, exhibiting the cutting of crystal and pebbles for spectacles.  
Cutlery works.

Beating out of copper, aluminium, and platinum.

Type foundry, and stereotyping.

Distilleries for spirits, essences, &c.

Manufacture of chocolate, with an establishment for the consumption of the products on the premises.

Manufacture of preserved fruits and vegetables.

Model (wash-house) bleaching-ground.

Silk-worm nursery, situate in the centre of a plantation of mulberry-trees.

Wine-press in the vicinity of a vine.

Perfumery works, extracting perfumes, partly from flowers grown in the park.

Farms appertaining to the various agricultural districts of France, with stables and apparatus shown in action.

Examples of Imperial farms, with picked animals; plans and statistics relative to the results obtained.

Dark chamber (camera obscura) for experiments in the measurement of light.

Complete photographic studio, exhibiting to the public the various operations of the laboratory.

Chamber of natural philosophy and observatory furnished with instruments by which visitors may become acquainted with certain scientific operations known only to few persons.

Monumental Campanile, with clock, bells, and chimes.

Models of various kinds of buildings in wood, stone, brick, pottery, artificial marble, concrete, metals, &c.

Examples of houses, showing the improvements introduced in France, with a view to health and comfort in cheap dwellings.

Kiosks, and chalets, fountains, vases, railings, fences, arbours of trellis-work, iron seats, rustic bridges, &c., for the decoration of gardens.

Hot-houses, containing the finest specimens of flowers and fruit.

Aquariums for rearing fish; ponds for aquatic plants.

Numerous clumps of trees and shrubberies will contribute to the embellishment of the park; and the turf will be kept fresh by means of pumps and other apparatus.

A lighthouse, 66 metres high, and other lighthouses of different heights, will every night throw their light upon the park and the banks of the Seine.

Lastly, the park will contain an international theatre, where will be performed pieces in the various dramatic styles of all countries. An international concert-hall, in which the musicians of the different nations will perform. An international club-room, which will serve as a place of meeting for the exhibitors; and on the ground floor will be various shops, &c., in which visitors arriving by the railway will find accommodation for dressing, washing, &c.

#### NATIONAL AND LOCAL PHOTOGRAPHIC PORTRAIT GALLERIES AND MUSEUMS.

In July, 1863, Mr. Lachlan MacLachlan, of Manchester, made public a plan (noticed in the *Journal*, vol. XI., page 616) for the systematic collection and preservation of authenticated photographs of distinguished individuals, by the establishment of national and local galleries or museums, under corporate or other authority and control. He now states that the Corporation of Manchester have adopted the suggestion, and have authorised him by a formal resolution "to make application to leading photographers for donations, for the purpose of the photographic museum of negative or transparent portraits of distinguished individuals of this or foreign countries, upon the distinct understanding that the corporation guarantee that any negatives or transparencies which may be liberally contributed shall not, in any case, be used for any private or trade purpose, but shall be systematically and carefully preserved, and used only with the express authority (in writing) of the corporation, for public purposes."



In order that the utmost security may be given for the permanency of the portraits, the adoption of two methods is proposed. By the first, the portraits would be transferred and enamelled by the process of M. Lafon de Camersac, or by other similar methods; and, as a guarantee of authenticity the corporate arms, with the signatures of the mayor and town clerk, as well as the autograph of the individual, would be burnt in on the reverse side. By the second method, negatives or positives by transmitted light would be hermetically sealed by a process devised by Mr. Daniel Stone, chemist, of Manchester.

It is hoped that photographers generally will assist in establishing, in a creditable manner, an institution which will secure such important results, which will at once throw a lustre upon their profession, and remain a monument of the great value of the art.

Mr. Machlachlan invites contributions from photographers, observing that it is of the highest importance to secure the likenesses of all distinguished persons whose portraits have been taken, from the earliest days of photography. In all cases the gift or loan of the negative will be desirable; but, if that be objected to, a positive, by transmitted light, will be received. In this case it should be accompanied by an unmounted print from the negative. It is very desirable that the portraits selected for enamelling should be uniform in size, the head to be  $1\frac{1}{4}$  inch, filling an oval of  $3\frac{1}{2}$  inches, and, if a transparency be offered, these dimensions should be adhered to; but the negative is preferable. Every portrait will bear the name of the contributor. An official receipt will be given for the same, and lists published in the photographic journals, periodically, of all contributions received. In transmitting negatives or transparencies, the names and designations of the portraits should be supplied.

Communications should be addressed to Mr. Machlachlan, Cross-street, Manchester.

#### MUSICAL EDUCATION.

The following letter has been addressed to the editor of the *Pull Mall Gazette*:—

SIR,—The *Journal of the Society of Arts* informs us that its Musical Committee has been continuing the inquiries to which reference has been already made in your columns. The information they have collected is very valuable, but there is one aspect of the question which has been almost wholly overlooked by the committee and their advisers, to which, as I think, the attention of the public ought to be directed. After a period during which the love of music was derided as a weakness, fit only for the feeble intellect of women, and in men as leading only to low company and vice, we seem to be gradually coming back to the old ideas of the sixteenth century, when to sing at sight was held an almost necessary accomplishment for a gentleman. It is now the commonest thing in the world to hear a cultivated man lament that he was not taught to play or sing when he was a boy. Oxford owns a baronet as her professor of music, and Edinburgh owns a baronet's brother in the same capacity. An earl's son "conducts" a large amateur orchestra. Even the public schools have caught the soft infection, and Eton and Harrow boys are not ashamed to give concerts to their admiring friends. To insinuate to a gentleman that he is incapable of knowing one tune from another is almost as insulting as to hint that he is incapable of understanding a joke. Every little town and every London suburb has its choral society, and almost every church its amateur choir; every drawing-room has its pianoforte; and, alas! almost every evening has its "little music." In fact, music has become a recognized element in English life, and its culture is regarded not only as a source of profound and lasting pleasures, but as a powerful instrument for refining and ennobling the mind.

Nevertheless, about the last thing that we think of is the ensuring a supply of thoroughly capable musical teachers and professional performers to meet the ever-increasing demand. Trusting to the great popular maxim about the demand ever calling out the supply, it never occurs to us to look a little into the facts of the case, or to inquire whether capable instructors for our children, and "artists" for our entertainment in public, can be supplied in unlimited quantity by a certain law of nature. The oddest thing, too, is the feeling with which we regard the members of the musical profession themselves. A teacher or singer is expected to be a musician and nothing more. If he has learnt his business, nobody, as a rule, thinks of expecting anything more from him. And yet we are all of us agreed in regarding the musical art as the expression of the purest and most elevated emotions of our nature. We look upon the masterpieces of the great composers as among the noblest and most surprising achievements of human genius and skill. We are never weary of the oratorios which embody the most sacred events in the history of our religion, and would rather sweep away every sermon and every theological book that is printed than lose Handel's "Messiah." Music vulgarized or turned to the purposes of vice is regarded as something desecrated; as a divine gift designed for the cultivation of all that is best within us, and thus doubly debased when made silly and contemptible. But as to the class of men and women on whom we depend for the study, performance, or creation of what we so highly esteem, it never seems to occur to us that their general personal qualifications must materially affect their influence for good or ill in their special work. Playing upon an instrument is treated as if a man played only with his fingers, and singing as if he sang only with his throat. Admitting in general talk that in music expression is everything, it does not occur to us that a musician cannot express that which he himself neither understands, thinks, nor feels. Anybody, we know, can learn to weigh sugars and to measure calicoes. I have heard, indeed, an enthusiastic London shoemaker maintain that of all the shoemakers in existence only a few are made capable of real shoemaking by nature. But this is not the general belief of the wearers of shoes. We know that in the callings not termed "liberal," success is not dependent on those intellectual and moral qualifications which are specially called into play in the liberal professions. When, however, the education and status of musicians are concerned, all our common sense seems to forsake us; and we assume that no higher qualifications are necessary for the player, the singer, and the teacher than for the journeyman who works on pianofortes, or the engraver and printer of musical publications.

Such being the popular theory, it is hardly a matter of surprise that the real want of the musical profession has not been touched on in the examinations of the gentlemen who have been giving evidence and opinions before the Musical Committee of the Society of Arts.

The importance of teaching the pupils one or two foreign languages for professional use has been dwelt upon, but no one seems to have probed the subject below the surface, no one has shown to the committee that a mere improvement in the purely professional teaching of academies will only cure half the evil, and that what is wanted is a thorough general education and cultivation of musical teachers and performers. No "Royal Academy of Music" can be worthy the name, or worth spending the national money upon, which neglects the training of its pupils as men and women, and devotes itself solely to the manufacture of pianoforte players, violinists, and vocalists. The classes of English life which furnish the members of the musical profession are not themselves in a position to supply a good liberal education to their sons and daughters. They cannot afford anything beyond a very unsatisfactory schooling while the embryo musicians are still boys and girls. The mere expense of boarding,



lodging, and clothing the young musical student is often a serious strain upon their slender finances. In fact, it is often because an intelligent boy or girl, who shows some fondness for music, can be set up as a "professor" at a small cost that very many young people are brought up to music, as they might be brought up to any common trade, by way of earning a livelihood.

Such being my view of the case, I am compelled to dissent from the opinion expressed before the committee to the effect that the working principal of any soundly-constituted Academy should be a professional musician. For certain it is that the success of the best-planned and best endowed establishment must depend materially on the qualifications of its working chief. What is wanted is a man who will do for the education of musicians what Dr. Arnold did for Rugby, and indirectly for English education generally; and various reasons combine to lead to the conclusion that such a chief ought not to be a professional musician. If a renovated Academy is to conciliate the respect and regard of the musical profession as a whole, it must be absolutely free from all suspicion of any one party influence, whether national or sectional. But every professional musician would certainly be supposed to be the representative of some one particular party, country, or musical school; and, however dispassionate and liberal his character, he would find it all but impossible to act with perfect independence, or with that unbiassed authority which nothing less than an independence, not only real but universally admitted, could ensure. None but a thoroughly determined, enlightened, and personally conciliatory non-professional man could have power to control the antagonisms which exist in the musical profession in all countries, and especially in our own, which owes a large number of its ablest performers and teachers to foreign races.

It implies, again, no slur upon professional musicians to argue that their calling is not generally favourable to the cultivation of that administrative ability which is precisely the qualification most needed in the head of an institution involving many exceptional difficulties of its own. To administer properly a great musical Academy, a principal ought to be hampered by the claims of no other regular occupation. It would require his daily attendance to an extent incompatible with the fulfilment of any other regular obligations; and unless he could thus devote himself without reserve to the authoritative superintendence of the work both of teachers and pupils, he could not possibly do justice either to the Academy itself, or to the State which found the funds, and appointed him to his office. Such a chief would of course have nothing to do with the direct legislation of the institution, which ought to be the work of the Committee of Council on Education; and in the actual administration of the institution he ought to be assisted by the advice of a council of the professors. The whole of the musical instruction ought to be in the hands of professional musicians, chosen among the best of the profession, without distinction of nationality, provided only that one uniform ideal of musical excellence was recognized in every detail of instruction, a merit which the present Academy has by no means attained, and which would be practically impossible if its government were in the hands of a professional man.

Whether the efforts of enthusiastic amateurs will succeed in persuading the present Ministry to place a sufficient sum for the creation of an Academy worthy of the country in the hands of the Council of Education may be a matter of doubt. As Sir George Clerk stated to the Committee of the Society of Arts, it is simply a question of demand and pressure. At any rate, the concession must come at last; and in the meantime, the more thoroughly the question is discussed under its various aspects, the sooner we may hope to see a serious attempt made to remedy the present most unsatisfactory state of affairs.—I am, Sir, your obedient servant,

J. M. CAPES.

## Fine Arts.

**RENOVATION OF THE CONCERT-ROOM AT THE CONSERVATOIRE OF PARIS.**—This theatre, of which a description was given in the notes respecting the Conservatoire published not long since in the *Journal*, has been completely renovated and decorated, in the *néo-Greek* style, by M. Adolphe Lance, and presents a marked contrast in appearance to that which it exhibited last year, when it was faded and dirty in the entrance. The back of the stage, which forms a *hémicycle* in ten panels, is decorated with figures of Apollo and the Muses, painted in wax, by M. Mazerolle; the pilasters which support the roof of this portion are ornamented with lyres and laurel-wreaths, in *light rouge antique* and bright yellow picked out with blue and powdered with stars. On the ceiling itself are six figures of *genii* supporting *escutcheons*, on which are the names of Haydn, Beethoven, Mozart, Gluck, Bach, and Handel. On the panels of the boxes are the names of Rossini, Cherubini, Mendelssohn, Weber, Méhul, Boïeldieu, Orpée, Grétry, Spontini, Donizetti, Hérold, and Halévy. On the front of the balcony are busts of Æschylus, Corneille, Racine, Molière, Crotillon, Marivaux, Beaumarchais, Voltaire, and Regnard. A great improvement has been made in the arrangement of the seats, at the sacrifice of twenty places out of nine hundred.

**ANNUAL COMPETITION AT THE PARIS SCHOOL OF FINE ARTS.**—The second competition amongst the scholars of the school, for prizes awarded by juries of their fellow students, took place not long since. This kind of competition is novel, and extremely interesting to the young men themselves and all who take an interest in Art education. The manner in which it is conducted is as follows:—Each *atelier*, of which there are eleven in the school, three each of Painting, Agriculture, and Sculpture, one of Engraving, and one of Die-sinking and engraving on precious stones, elects five of its members to form a jury, and the juries have the power of awarding three prizes of 300fr., 200fr., and 100fr. value respectively to the works of the adjoining *atelier*; thus, to take the case of painting—the juries elected by the pupils of M. Cabanel and of M. Pils judge the works produced in the *atelier* of M. Gerome, and so on. There were thirty-three prizes to be distributed, but the young jurors withheld the first prize in one case; in another they added an honorary vote, for the designs of a young sculptor named Boulanger, who had died during the twelve months; and in a third they voted a third-class prize *ex-æquo* between two competitors. Of the prizemen, one-third received awards of the like kind last year. The productions were exhibited for three days before the prizes were awarded, and there is no doubt that the new system adopted for the School of Fine Arts has swept away that mannerism—that scholastic servility—which was the reproach of the old system. Nothing can be more unlike than the styles of the three Professors of Painting—MM. Cabanel, Pils, and Gerome; and there is no appearance in the works of their pupils that either of the masters has attempted to force his manner upon those who are placed under his guidance. The works of the pupils included every kind of painting—history, the *figure genre*, landscape, portraiture, dogs, flowers, arms, stuffs, and ornaments. M. Guillaume, lately one of the professors of sculpture in the school, has been appointed to succeed M. Robert-Fleury, as general director of the establishment.

**THESES IN ART.**—The Belgian Academy of the Fine Arts has announced the following subjects for competition for the current session:—The History of Mural Painting in Belgium, and its polychromatic application to Architecture, with indications of the characteristics and methods of each epoch and of each school. Appreciation of Rubens as architect. Antwerp and Brussels possess many buildings of which the plans are attributed to

Rubens; is such tradition authentic, or is the style of such buildings only to be attributed to the influences produced by the works of the great Flemish master? Analysis and appreciation of (from the double points of view of science and of art) the principal methods of teaching drawing which have prevailed from the time of the ancients to our own—their value and influence. The origin and organisation of the church schools (*Maitris des Eglises*) in Holland and the province of Liège. What share had they in the progress of musical art, and what were the causes of their prosperity and decay? The prizes offered are:—For the first subject, 1,200 francs; for the second, 800 francs; and for the third and fourth, 600 francs each, and the theses, which may be written in French, Latin, or Flemish, are to be sent in by the end of May.

### Commerce.

**CONSUMPTION OF SUGAR.**—Messrs. Travers give the following as the present consumption of sugar per head in different countries:—England, 41½ lbs.; United States, 31½ lbs.; France, 14½ lbs.; Zollverein, 9 lbs.; Austria, 4 lbs.; and observe with regard to the place of Austria at the end of the list, that that country is still in the midnight gloom of protection, and, in consequence, her manufactures are petty, her resources are undeveloped, and her people are poor. In England, on the other hand, although there is not yet free trade in sugar, this is about the only article on which protection still exists, and the extraordinary increase in the wealth of the country since 1844, entirely due to a liberal commercial policy, has made articles that were looked on as luxuries by our fathers, and which are still entirely out of the reach of all but the rich in countries with a protective tariff, necessities of life to us.

**SUGAR TRADE OF THE UNITED STATES.**—The total receipts of foreign raw sugar into the United States, not including the states on the Pacific, for the year ending December 31, 1865, were 362,243 tons, against the receipts in 1864 of 214,099 tons; in 1863, 243,137 tons; in 1862, 247,015 tons; in 1861, 242,908 tons; and in 1860, 341,532 tons, and the consumption of foreign in 1865 was 345,809 tons, against a consumption of foreign in 1864 of 192,660 tons; in 1863, 231,308 tons; in 1862, 241,411 tons, in 1861, 241,420 tons; and in 1860, 296,950 tons, while the total consumption of foreign and domestic cane sugar in 1865 was 350,809 tons, against a total consumption in 1864 of 220,660 tons; in 1863, 284,308 tons; in 1862, 432,411 tons; in 1861, 363,819 tons; and in 1860, 415,281 tons, being an increase in the total consumption of 1865, as compared with that of 1864, of 130,149 tons, or nearly 59 per cent. While the consumption of sugar has frequently been larger than that of the past year, when the productive fields of Louisiana yielded their heavy crops, the consumption of foreign sugar was never so great as that of 1865; the nearest approximation to it was in 1860, when 296,950 tons were withdrawn, but the deliveries last year exceeded these figures by nearly 50,000 tons. The consumption of raw sugar in California and Oregon the past year is estimated at 11,000 tons. The continued high prices which have ruled for the imported article, have had the effect of pushing the manufacture of maple sugar, in its season, to its utmost limit. The crop of this description last year was quite large, and the estimates that are made of 27,000 to 29,000 tons, are probably not far from the actual result. The manufacture of sugar from the sorghum, the beet, and Indian corn, is yet in its infancy; and the quantity made from these plants last year was so small that no note can be taken of them. It will thus be seen that the total consumption of raw sugar of all kinds in the United States may be stated at 412,000 tons, against a total consumption of all kinds in 1864 of 280,500 tons, being an increase of 131,500 tons, or nearly 47 per cent.

**COAL AND TIMBER IN JAPAN.**—Mr. Ensley, in his commercial report on the trade of Hakodadi for last year, says:—"Several mines are at present being worked in the island of Yesso, although, owing to the primitive system adopted by the Japanese, they are of little importance. A new coal mine has lately been discovered in the neighbourhood of Iwanai, in the north-west part of the island; it is said to contain coal of a very good quality, and if properly worked, might produce coal very far superior to that of the other parts of Japan. This mine is the first one worked according to the European system, and promises fair for the future. The island of Yesso is thickly covered with immense forests, containing numerous kinds of wood admirably adapted for building purposes; oak and ash come from the interior of this island. A small export trade has been carried on in this article by one of the British merchants at this port, who has also erected a steam saw-mill. As yet, little business has been transacted with the Japanese, but there can exist no doubt that these endeavours will be ultimately crowned with a brilliant success, and that the Japanese will speedily appreciate the immense superiority of machinery over manual labour."

### Colonies.

**PROGRESS OF QUEENSLAND.**—Six years ago there was a mail but once a fortnight from Queensland to Sydney, there is now a steamer leaves daily for that port. In 1859 the banks of Fitzroy River were unknown to white men, and Rockhampton on its banks is now a fine and thriving city. The greater part of the country from Rockhampton up to the Gulf of Carpentaria has been taken up by squatters, and gold fields and copper mines are being worked upwards of 200 miles from Keppel Bay. Railways are gradually usurping the occupation of the bullock and horse-dray. The electric wire is extending itself in places which were not heard of six years ago. There are now in operation a Brisbane Gas Company, a Queensland Steam Navigation Company, a Queensland Insurance Company, many cotton and sugar companies, a quartz crushing company, two copper-mining companies, and numerous building societies. All these companies report favourably of their progress, but not one of them was in existence six years ago.

**NEW SOUTH WALES FINANCE.**—The debt of this colony is said to be over eight millions sterling, the interest of which amounts to about £1 per head for every man woman and child. The deficiency for the year 1863 has been ascertained to have been a little under £400,000. This has been met by the Treasury of the late Government by the issue of the Treasury bills. The deficiency for 1864 was a little over £400,000, towards meeting which Parliament has authorised the issue of short-dated debentures; none of these have been sold, but the government were indebted to the banks for the amount. The deficiency for the present year is expected to be very small, in consequence of the savings that have been effected, and at the end of 1866 it is expected there will be a surplus of £47,670, but in the event of expenditure for the minor roads being forced on the Government, there will then be a deficiency of £49,219. In order to provide for the deficiencies of 1863 and 1864 it will be necessary to have recourse to increased taxation.

### Obituary.

GODFREY SYKES, the decorative artist of the South Kensington Museum, died on the 28th February. Up to the present time the world has known little of this artist, but it will know a great deal more in a few months,

and appreciate him still more in years to come. It is hardly too much to say that, with perhaps only one exception, he was, *par excellence*, the decorative artist of his time in England, who will have founded a style which will hand his name down to posterity. Already a few who have seen his decorative terra cottas, which have been erected on the new buildings for the South Kensington Museum, and who are well qualified to judge, consider the work a feature of the time. About five years ago Mr. Sykes came from the Sheffield School of Art, where he had been a student, and pupil-teacher, and master in succession, to assist in realizing the Prince Consort's plans for the building in the Royal Horticultural Gardens, and he undertook the decoration of Capt. Fowke's arcades in those Gardens. His success with the arcade in the Conservatory, the prettiest building of the kind—which has been engraved in the *Illustrated News*—and the columns of the south arcades, gave an impetus to the revival of terra-cotta, which Mr. Barry, A.R.A., and others, have largely used at the Charing-cross and Richmond Hotels and other places. But Mr. Sykes' greatest achievement is the production of a series of columns now being erected in front of the new Lecture Theatre at the South Kensington Museum, which, for style and size, are among the most beautiful works which have ever been produced, and are worthy to be placed in the Certosa, at Pavia, or the Hospital, at Milan. These columns were Mr. Sykes' latest work, and as he was breathing his last they were being fixed in their places. His faith in art was based on a strong reliance on Michael Angelo, Raffaele, and their immediate Italian predecessors. He used to groan at the want of faith in artists. Whilst his art resembled his great masters', it was no weak servile version, but his own. Besides being a sculptor and modeller, with a fine sense of proportion in architecture, he was also a skilled painter, and could use his brush with rapidity and decision, and he has been, perhaps, the first artist who has ventured to take the mere structural forms of ribs and bolts of iron-work and make them decorative on their own surfaces. Specimens of his success in this division may be seen in the south court of the Kensington Museum. Just before his death he had nearly matured the designs for the decoration of the new refreshment rooms, in Majolica, a kind of work which has not been attempted in modern times, except in the Queen's dairy at Frogmore. Mr. Sykes is the most eminent designer that has been produced by the National Schools of Art, and is the pride of his native town, Sheffield. Happily he had instilled his principles into several of his scholars, and something like a school has been formed to perpetuate his inspiration. He was only in the forty-first year of his age, and his death is the third great loss which the South Kensington Museum establishment has sustained in the last eight months. The late Captain Fowke had a great affection for him, and when Mr. Sykes was too feeble to ascend the stairs of the great picture galleries of the Exhibition of 1862, now pulled down, he carried him up in his arms to see the decorations for the Guards' ball, which was held in them. Mr. Sykes has left behind many designs for the completion of the decorative details of the South Kensington Museum, which his pupils will be able to work out. He has left a design for a monument to be erected in terra cotta over the grave of Mulready, in Kensal-green; and the numerous readers of the *Cornhill Magazine* may bear Godfrey Sykes in their minds whilst looking at the cover of the *Cornhill Magazine*, which he designed at the suggestion of Thackeray, who thoroughly appreciated his really great genius. On Wednesday, the 7th inst., he was buried in the Brompton Cemetery, the funeral being attended by the members of his family, his master, Mr. Stevens, and two particular pupils, Mr. Gamble and Mr. Townroe, besides about seventy officers, masters, and students, of South Kensington, among whom were Mr. Cole, C.B., Mr. Redgrave, R.A., Col. Scott, R.E., Captains Donnelly and Festing, R.E., Mr. P. C. Owen, Mr. Burchett, Mr. R.

Wylde, Mr. Collinson, Mr. Liddell, Mr. Snell, Mr. Blanshard, Mr. Peile, Mr. A. S. Cole, Mr. Wehnert, Mr. Slocombe, Mr. Bowler, Mr. Wallis, Mr. Matchwick, Mr. Denby, Mr. Moody, Mr. Dillon, Mr. Ryan, Mr. Morris, Mr. Douglas, and others.

## Publications Issued.

MONOGRAMS ANCIENT AND MODERN, by John Eliot Hodgkin, F.S.A. (*Longmans & Co.*). This work, which is largely illustrated by chromo-lithography, deals with the history and art treatment of monograms and gives numerous examples, collected and designed by the author. It gives a short *resumé* of the history from the days when the Greek cities struck monograms on their coins, down to the present time. He has endeavoured to show, by the examples of modern monograms, designed by the author for his own friends, that they are more susceptible of artistic treatment than they often receive, and that the most refractory initials may be coaxed by a little skill into friendly accord, and he concludes his preface by making suggestions for the guidance of men who desire to produce such devices. The work is quaintly got up, and the book takes the form of a shield, the letter-press accommodating itself to that form.

## Notes.

THE PARIS EXHIBITION AND WORKING MEN.—The following is a translation of a paragraph published in the new French journal, *Le Panthéon de l'Industrie et des Arts*:—"The city of Lyons is at present busying itself with the election of representatives of the working population of that city, who are to be sent to Paris to the Exhibition of 1867. To enable this to be done, a subscription has been opened to cover the travelling and other expenses of living, &c., of the representatives sent. We greatly approve of this step taken by the City of Lyons; it is a good example to other manufacturing districts, which we hope to see imitated. We are convinced beforehand that the representatives, understanding the importance of their duties and honourable mission, will come to the Exhibition to study the useful and serious side of it; and we are sure that they will be but rarely seen in the foolish and enervating places of frivolous amusement where the Parisian *bohème* and *demi-monde* are in the habit of taking their fling day and night."

INCrustation IN STEAM BOILERS.—Mr. J. Riley writes to say that for some months past he has successfully used potatoes to prevent incrustation in boilers. He says:—"Before the steam is up on Monday mornings I place threepennyworth in the boiler, through the safety-valve, and blow some water off on Saturdays, to clear the dirt out, so that the expense is very small. I use the smallest and commonest potatoes, because they are more for the money, and answer the purpose quite as well."

## Correspondence.

GAS PIPES IN SUBWAYS.—SIR,—I have read the discussion which recently took place on Mr. Burnell's paper on the gas supply of Paris, and beg to endorse the remarks made by Mr. Godwin in reference to the question of laying gas mains in subways. The subways of Nottingham having been alluded to, I will give you some information as to their construction, extent, and use, and as the corporation of this borough have for some time given considerable attention to the subject, their experience may have some little value. The first subways formed were in Victoria-street and Queen-street, and have an aggregate length of about 550 feet; these new streets were made in the centre of the town, and being the first

of an extensive series of town improvements, the corporation were desirous of introducing the best means of preventing the constant breaking up of the surfaces of the public streets for drainage, gas, water, and other services. The subway is 10 feet wide, and 7 feet high, and was completed three years ago, and therein were laid the sewers and branch drains, and the gas and water mains and services. The subway is well ventilated; no escape of gas or water has, to my knowledge, taken place, though the interior has been constantly visited and worked in by the men employed by the corporation, and the gas and water companies, for branch drains and service pipes. I have never observed a safety lamp used, or heard of its necessity; and I have seen gas service connections made with an open light, even with a gas-light obtained direct from the main, immediately contiguous to the branch in course of being attached. Hitherto the workmen alluded to have had, at all times, free access to the subway. The second subway was made under Lister Gate, the greatest thoroughfare in Nottingham, after the same had been widened and improved at an enormous cost, to meet the increasing traffic. This subway is somewhat similar to the first, but with improved details as to ventilation, access, and internal convenience, and therein the main sewer of that part of the town is built with service connections, and also the telegraph wires are therein fixed. For some reason the gas and water companies have declined to use it, and have instead deliberately ripped up the street with four trenches for two lines (each) of gas and water mains. The corporation are highly annoyed, but, notwithstanding, have decided to construct a similar subway under a third street improvement now in progress. The advantage of subways (if safe for gas pipes) is universally admitted, and their most earnest opponents have failed to show any case against them, for water, telegraph, and similar purposes (*vide Minutes of the Select Committee, June, 1864*), but in respect of gas mains there undoubtedly is possible danger (as in every place to which gas is conducted), unless sufficient means of ventilation are provided, and the best modes employed in making and continuing the joints of mains and service pipes. I entirely believe in the statement of Mr. Hawksley that, in a well managed company, the escape from the mains is very slight indeed (say from  $2\frac{1}{2}$  to 5 per cent.); but I venture to contend, that in a well regulated subway, escape from the mains to become dangerous need not take place at all, for the following reasons:—1. That they are not subjected to the perpetual vibration caused by street traffic. (In a subway there is no vibration.) 2. That they are not constantly disturbed by excavations around and under them for services, and for drainage operations. 3. That they are under regular inspection, and the joints can be recaulked when necessary, or bitumenised or varnished from time to time. 4. That oxidation would be less rapid. Furthermore, if an insidious escape of gas happened, an ordinary ventilation would prevent serious consequences. The wrought iron services are the greatest promoters of leakage, and, during a daily experience of underground work for the last 11 years, I have scarcely ever found a perfect service pipe which was not new or nearly so. The lime of the pavement concrete, and the damp of the soil, destroy the pipe, and the traffic loosens the joints. Now, this may be prevented by using lead services, but, in a subway, the destructive influences mentioned would not operate to anything like the same extent with wrought iron, and their renewals would be readily accomplished. It has been stated that, under the present system, escape gas is absorbed by the soil, and that soil forms the best cushion on which to lay the pipes. If this be the opinion of gas companies, the subway plan offers no impediment, as on the side of the subway intended for gas mains the same may be embedded to any required extent; in fact, this is already the case in Covent Garden subway. Leakage by endomose action has been advanced, but if gas companies prove all their pipes, as they profess to

do, the pressure employed in gas mains will be altogether insensible. It is true, if a large pipe be accidentally broken, the same damage might arise as if the casualty occurred in a street or any other place, but if large operations were in progress in the subway, corresponding precaution would (and could most easily) be taken to meet the contingency of accident; and it is only reasonable to expect, that in a large system of subways, the control and management thereof would be in the hands of a single and responsible authority. It is the interest and duty of corporations and other bodies, having the charge of the highways and streets of large towns, to prevent as much as possible their constant disturbance; and if the subways now proposed will effect this object, without detriment to the companies, they ought to be compelled by the legislature to adopt them, and I think it rather exhibits a want of fairness and public spirit for the gas and water companies combinedly to oppose them (the latter company without a shadow of pretence) without giving those trials which the Metropolitan Board and the Nottingham Corporation have so generously and earnestly offered. It should be understood that the so called subways in Paris are simply sewers above the water level, in which the gas and water mains are fixed, and not subways proper as those in England.—I am, &c., M. O. TARBOTTON, M. Inst. C. E., Corporation Surveyor. Nottingham, 20th Feb., 1866.

MR. GRAY'S PAPER ON STEAM-SHIPS.—SIR,—MR. GRAY proposed to deal with the four subjects—Bulkheads; boats; boilers and safety-valves; compasses; anchors and cables. He proposed to inquire how far statutory interference is demanded in the minor details of construction and equipment. As regards the mere question of how ships shall be constructed for simple mercantile transactions, setting aside the plying for hire or carrying passengers, I do not see why the laws should interfere. If, on the risk, as with other transactions, men will be found to enter for the wages offered, then it becomes a simple matter of building and working a vehicle. But who shall determine when that character may cease, and the vessel be employed either for passengers or as a transport for troops homeward? On the railways, in the carriages, and over the bridges which span streams or valleys, justly, I think, the laws look to the security of the public before they permit traffic to pass. Then, if there be a danger to be apprehended on land from the workmanship, as well as the material employed, surely the vessel, the engines, and the vast range of difficulties as to the crew employed, render it a matter of vital importance that the structure should be, as far as human foresight can govern it, perfect *per se*. And, beyond this, there should be a certain legal uniformity by which perfect vessels should have a *quasi* patent of superiority, and only such vessels should be legally authorised to carry passengers, deducting in all such cases a *pro rata* tonnage for each individual embarked. Moreover, in return for the premium paid for such passage, each passenger should, as in the case of the railways, have his right of damages against the owners where any act of negligence can be proved. Before entering further into how the legislature should act, it will be well to consider whether the means adopted as to the sections, longitudinal bulkheads, and other internal fittings of ships are, *bona fide*, what they are represented to be. And, perhaps, I may be allowed to speak decidedly on this subject, having, in the year 1818, first urged the compartment and unsinkable system on the Government. Further, as having first carried it out partly in H.M.S. *Atna*, in 1830; again in H.M.S. *Terror* and *Erebus*, in 1835; and H.M.S. *Assistance* was partly so fitted, but not by me, in 1852. Now, with the exception of H.M.S. *Terror* and *Erebus*, I do not believe that any of them, from difficulties opposed, were honestly fitted with such sealed sectional bulkheads as would, similarly to the *Terror*, have each withstood the pressure of its neighbouring compartment, if partly filled with water in motion. And it is to this point that I think the law should be directed. No vessel should

be suffered to sail under false colours, and no vessel falsely stated to be fitted with sectional bulkheads should be foisted on ignorant landmen as a superior vessel. A ship should be so subdivided into cubical sections, that the filling of one should not destroy its neighbour—and the filling of any, even two, should not endanger her safety. Next to these transverse bulkheads, I hold that the very essence of safety consists in the wing longitudinal segments, which should in steamers be devoted to coals, and rising from the flat of the engine-room or floor-heads of wooden vessels to the decks, would become perfect safeguards to any irruption of water in the cases of running down. Further, there is a space at a short distance from the stern, where, either impinging on another vessel or receiving a blow, the water should be intercepted, and where no goods or stores, particularly coals, as in the *London*, should be stowed. I believe that all these matters should be efficiently supervised, and the patent of "competency" never be awarded until very satisfactory scrutiny had taken place. Beyond all these we have to consider the last effort to save ship and crew—and now that ships have been fitted with iron decks, I see no difficulty in shutting off the holds by hermetically sealing certain hatches, and using one of the smallest compartments for the crew. In order to understand this perfectly, let us assume that we can secure the floatation of the ship by a certain cubic measurement, in which the engines should be included. If those hatches close from beneath air-tight, then the injection of air, by a donkey-engine on deck, would defy the entry of water. The drawing of the fires would of course follow the blowing off of some 30 or 40 tons of water. Now let us turn to the boats. This has been one of my hobbies more than half a century.—First, no ship should go to sea with any inferior boat. It is discreditable to the owner; it is unjust to the crew, who have to labour more heavily; and it is a loss to the parties, because they generally have to hire boats abroad. Boats are made too heavy, under the false impression that they bear heavy work better, but in reality they destroy themselves. Next, should iron-boats enter into the number required? Or, if they be admitted, let them be fitted as *de facto* lifeboats, by cellular divisions, and proved by filling them alongside before they are hoisted in. On a rough calculation I should say that these boats would not exceed a ton in weight, but 2½ tons could be met by a careful attention to every available air-space. However, I would not even then regard this as a true lifeboat: she would merely be brought into comparison with a wooden boat. The lifeboat should, *de facto*, deserve the appellation, and be capable of supporting a definite number of picked men, fit to manage her, and render aid to the other boats. Some should certainly be hung to the davits ready for instant service; but a *balsa* lifeboat, with open bottom, so as to defy any seas which might fall into her, should be supplied by all eminent ship-owners. Upon the subject of boilers, safety-valves, &c., I would rather not venture to say anything, seeing that engineers themselves have their own crotchets, and I should be invading their province. As regards the compasses, I firmly believe in the possibility of meeting the question of local attraction, for a limited period, sufficient to correct my course, but as such ideas are classed with perpetual motion, and squaring the circle, I shall content myself with keeping its solution before me, until I can experiment to satisfy myself, before I intrude my notions on others. The anchors and cables do not disturb me, as to their manufacture, quality, or holding powers; but their stowage should meet the attention of those whose duty it may be to report on the readiness of a ship for sea. In former times they were of the first importance to the seaman, and in allotting lockers for the cables care was taken to afford such a space aft along the deck that they could be easily handled. Now machinery supersedes the capstan, messenger, &c.; and to suit the cargo-carrying ships, any place selected by the owner must be

agreed to by the commander. Therefore we find that in some vessels the cables are payed down before the fore-hatchway, and thus with the anchors and the heavy stores of the ship stowed in the forepeak, any introduction of water into the forward sections is certain to materially endanger the ship in smooth water, and must be still more dangerous in a gale. It may be assumed that, as a general rule, private firms have a right to build on whatever lines may be presented to them—as in the case of the cigar vessel. This cannot be denied. But if that vessel was placed to carry passengers between England and her colonies, we fancy the public would be loud in the demand for the interference of Government. So in our own grounds we may construct and use any machines worked by our own people we please, but the moment we come upon the highway we are prevented from endangering the lives of the community, or inviting travellers to risk their lives. There is one point not touched upon in the programme of the matters discussed by Mr. Gray, and that is the modes which should be adopted in saving life—forming rafts, and improvising lifeboats. It would alone form a very interesting discussion. But as that cannot be attempted now, I would observe that I have seen a very important lifeboat constructed for going through a surf by the double set of engine hoses secured round a carvel cutter of 25 feet. To any passenger vessel it might prove of great importance to carry a set of india-rubber tubes of three inches diameter to be used for similar purposes, placed round a boat where the fender is usually secured. The facility with which this arrangement throws off a sea in a deeply laden boat is almost incredible.—I am, &c., EDWARD BELCHER.

DAMP WALLS.—SIR—I beg to state, for the information of Mr. Leopold Paget, that unfortunately the walls of his house have been built with soft bricks; if they had been hard burnt, no damp would have passed through. Bricks are properly burnt when they do not sensibly increase in weight after soaking in water for 24 hours. No paint or composition, not even cement, will adhere to soft bricks; but Mr. Paget may try several washes in very dry weather, of what is called "bright varnish," a cheap material. After twelve months' seasoning, the walls may be painted several coats with any stone colour in oil, which will then adhere. The reason for applying bright varnish in the first place is, that it sinks entirely into the soft material. Tar is often used, but as it does not penetrate, and is slowly soluble in water, it must be repeated once or twice every year, and, moreover, its black colour cannot be concealed or covered by oil paint of any description.—I am, &c., HENRY W. REVELEY.

1, Baker-street, Reading.

#### MEETINGS FOR THE ENSUING WEEK.

- MON.....Geographical, 8½. 1. "On the recent Volcanic Eruption in the Harbour of Santorino." 2. Col. Rigby, "On the English Captives in Somali-land." 3. Mr. T. Valentine Robins, "Twelve Months at the confluence of the Niger and Tshadda."  
British Architects, 8.  
TUES...Medical and Surgical, 8½.  
Civil Engineers, 8. Discussion upon "The hydraulic lift graving dock."  
Zoological 8½.  
Syro-Egyptian, 7½. Mr. J. Winram, "An Analysis of the Chronological List of Manetho."  
Photographic, 8.  
Ethnological, 8. 1. Sir John Lubbock, Bart., and Mr. Frederick Lubbock, "On the true assignation of the Bronze Weapons, &c." 2. Rev. F. W. Farrar, "On the Adaptation of Races of Man."  
Royal Inst., 3. Professor Frankland, "On the non-metallic elements."  
WED.....Society of Arts, 8. Mr. A. M. Bell, "On Visible Speech; or, a Universal and Self-interpreting Physiologic, Alphabet."  
Graphic, 8.  
Microscopical, 8.  
Literary Fund, 2. Annual meeting.

- THURS...** Royal, 8 $\frac{1}{2}$ .  
 Antiquaries, 8 $\frac{1}{2}$ .  
 Linnæan, 8.  
 Chemical, 8.  
 Numismatic, 7.  
 Royal Society Club, 6.  
 Royal Inst., 3. Professor Frankland, "On the non-metalliferous elements."  
 Statistical, 4. Annual Meeting.
- FRI .....** Philological, 8.  
 Royal Inst., 8. Mr. Balfour Stewart, F.R.S., "On the evidence of the existence of an Ethereal Medium pervading space."
- SAT .....** Royal Inst., 3. Rev. G. Henslow, M.A., "On structural and systematic botany."

## PARLIAMENTARY REPORTS.

### SESSIONAL PRINTED PAPERS.

*Delivered on 28th February, 1866.*

- Par.  
 Numb.
36. Bills—Hop Trade.  
 38. „ Rochdale Vicarage.  
 40. „ Pensions (as amended in Committee).  
 15. (91 to 100) Railway and Canal, &c., Bills—Board of Trade Reports.  
 16. Local Government Act—Return.  
 28. East India (Cattle Plague)—Report of Commission, &c.  
 69. Railway and Canal, &c., Bills—First Report.  
 Prussia—Treaty of Navigation.  
 Japan—Correspondence, No. 1 (1866).  
 Session, 1865.
458. Army—Return.

## Patents.

*From Commissioners of Patents' Journal, March 2nd.*

### GRANTS OF PROVISIONAL PROTECTION.

- Artificial coal tars—383—P. A. F. Bobœuf.  
 Bed bottoms, spring—380—S. J. Salkeld.  
 Black lead, packing and pressing—470—R. B. Pilliner.  
 Boot and shoes, stiffenings for the heels of—397—N. H. Felt.  
 Chilled rolls, casting—463—F. R. Wheeldon.  
 Cloths, endless—501—J. H. Whitehead.  
 Coffee, automatic apparatus for roasting—527—A. B. Childs.  
 Collars, making—474—W. E. Newton.  
 Cutting presses—328—J. C. Patrick.  
 Distilling—461—A. C. Kirk.  
 Dye—525—J. Barry.  
 Earthenware, preparing clay-dust for making—402—R. W. Armstrong.  
 Emery, substitute for—389—R. Bond, W. J. Russell, and B. S. Fisher.  
 Fabrics, cutting—515—J. Whalley.  
 Fabrics, making—499—J. H. Whitehead.  
 Fibrous materials—388—J. Shaw and J. Whitaker.  
 Fibrous materials, hackling—430—J. Tomlinson.  
 Fibrous substances, spinning and doubling—448—J. Towasend.  
 Files—288—J. B. Dalhoff.  
 Fire-arms, breech-loading—403—F. T. Baker.  
 Fire-arms, breech-loading—422—J. H. Burton.  
 Fire-arms, breech-loading—491—W. S. Riley.  
 Fire-arms, breech-loading, and in cartridges for same—529—W. E. Newton.  
 Fire-arms, cartridges for breech-loading—443—W. R. Lake.  
 Fire-escapes—381—J. Sawyer and S. Middleton.  
 Fish hooks—413—J. Warner.  
 Furnaces, consumption of smoke in—487—C. Gall.  
 Gas, heating boilers, &c., by means of—346—T. A. G. Willington.  
 Glass, furnaces used in making—399—E. Bevan and A. Fleming.  
 Glazed surfaces, producing—308—G. Greaves.  
 Grain, sowing—18—H. A. Bonneville.  
 Grates—445—W. Young.  
 Guns and rifles, breech-loading, and in cartridges for same—519—J. H. Walsh.  
 Gun barrels, cleaning—537—H. Bayliss.  
 Hair cloth—418—J. Ryley.  
 Hats—395—S. B. Simon.  
 Hats—428—G. Hart.  
 Hats, felting the bodies of—455—J. Vero.  
 Heating apparatus—459—W. Cotter.  
 Horse nails—426—J. Huggett.  
 Illusory exhibitions, apparatus used in—442—A. Stoddart.  
 Jewellery, ornamental surfaces for—505—W. B. Woodbury.  
 Lamps—306—H. A. Bonneville.  
 Liquids, pumps for raising and forcing—454—J. B. Fenby.  
 Machinery, clutch for driving—406—W. Clissold.  
 Male or female attire, pocket for—313—G. D. Jones.  
 Manure—191—A. F. Vineur.  
 Meat for food, preparation of—483—A. H. Hassall.  
 Metallic chains, ornamental—317—T. Jenks.  
 Minerals, cutting—477—J. Rothery.

- Optical instruments—473—H. E. Newton.  
 Oxidation, &c., preserving metals from—394—H. E. F. de Briou.  
 Paper collars—437—A. V. Newton.  
 Paper, printing designs on—467—R. Smith.  
 Paraffin, purifying—471—J. and J. K. Soames.  
 Pavements—3035—T. Berrens.  
 Photographic lens—396—J. H. Dallmeyer.  
 Port stopper—436—A. V. Newton.  
 Printing machines—393—W. Rock.  
 Privies and commodes—412—C. E. Gajola.  
 Pumps—539—H. S. Swift.  
 Rails, bars, and girders—453—S. W. Kelly.  
 Railway carriages, communication between guards and passengers in—276—H. Wilde.  
 Railway trains, securing the safety of persons travelling by—304—C. Defries.  
 Range ovens—427—J. G. Clarke.  
 Saltpetre and white lead—301—C. Delafield.  
 Screw propellers—460—H. B. Young.  
 Sewing machines—495—J. Paterson.  
 Sewing machines, carriages and castors for—421—W. R. Lake.  
 Shower baths, raising water in—392—J. G. Avery.  
 Shuttle tongues—507—S. Nelson.  
 Silk and satin fabrics, ornamentation of—387—R. E. Higson.  
 Skins, reducing the thickness of—493—W. E. Gedge.  
 Slide valves, pistons, and glands—479—T. Adams and G. J. Parson.  
 Spinning and drawing rollers—408—J. H. Johnson.  
 Spinning, rings for—407—J. Higgins.  
 Steam boilers, heating the feed water for—503—J. H. Whitehead.  
 Steam, carburetting low pressure superheated—513—J. Kidd.  
 Steam engine, rotary—384—H. Deymann.  
 Steam engines—425—B. W. Farey.  
 Steam vessels, extinguishing fires in—456—J. Ogden and A. Rogers.  
 Threshing machines—452—W. Brown and C. N. May.  
 Valves—523—T. Williamson and E. P. Marren.  
 Vehicles—370—E. Price.  
 Vehicles, wheels for—409—G. F. Russell.  
 Vessels, stopping leaks in—439—F. P. Warren.  
 Water and other taps—462—S. Mason.  
 Watercourses, &c., cutting—286—J. Robertson.  
 Water, raising or forcing—386—J. B. Atwater.  
 Weaving, jacquard wires used in looms for—417—J. and W. Binns.  
 Weaving, looms for—401—J. Walker.  
 Weaving, looms for—465—J. Holding and P. Todd.  
 Weaving, looms for—509—H. Lea.  
 Weighing apparatus—543—N. R. Hall.  
 Wire and wire rods, rolling—485—G. Bedson.  
 Wood, combining surfaces of—451—S. Drake.  
 Wool, combing—450—T. Whitely.  
 Woolen damasks—416—E. Seyd.  
 Woven fabrics, cutting the pile of—446—J. Patterson.

### INVENTIONS WITH COMPLETE SPECIFICATIONS FILED.

- Drills—535—W. R. Lake.  
 Iron and steel—554—C. J. Caumon.  
 Skates—573—J. I. Barber.  
 Steam boilers—533—W. E. Gedge.

### PATENTS SEALED.

- |                                  |   |
|----------------------------------|---|
| 2275. J. Snider, jun.            | 2318. A. E. Nordenskiöld and J. W. Smitt. |
| 2277. J. Grand.                  | 2319. J. Pennington.                      |
| 2281. W. Bunger.                 | 2329. C. J. Webb.                         |
| 2283. L. Gachin.                 | 2330. D. Keys.                            |
| 2291. E. and E. Green, jun.      | 2333. G. Tangye and J. Jewsbury.          |
| 2299. A. Morel.                  | 2336. T. D. Stetson.                      |
| 2301. J. Askew.                  | 2370. H. A. Bonneville.                   |
| 2310. J. Brigham & R. Bickerton. | 2756. T. R. Crampton.                     |
| 2316. R. P. Roberts.             |   |

*From Commissioners of Patents' Journal, March 6th.*

### PATENTS SEALED.

- |                                   |                        |
|-----------------------------------|------------------------|
| 2305. J. Webster.                 | 2387. E. Clark.        |
| 2309. J. Anderson.                | 2397. D. J. Fleetwood. |
| 2313. J. Hose.                    | 2456. N. Korshunoff.   |
| 2320. S. Davis.                   | 2495. S. Dunn.         |
| 2322. W. Hewitt.                  | 2504. G. Davies.       |
| 2327. J. Lightfoot.               | 2537. W. E. Newton.    |
| 2342. J. Dodd.                    | 2650. W. E. Newton.    |
| 2357. L. G. Sourzac & L. Bombail. | 2681. H. E. Newton.    |
| 2371. J. H. Johnson.              | 3258. A. V. Newton.    |
| 2373. F. Carlier.                 | 3383. W. E. Newton.    |

### PATENTS ON WHICH THE STAMP DUTY OF £50 HAS BEEN PAID.

- |                     |                                  |
|---------------------|----------------------------------|
| 535. H. Edmonds.    | 602. C. M. Palmer & J. McIntyre. |
| 567. J. Maxfield.   | 584. C. Garton.                  |
| 570. E. Paine.      | 594. G. Price and W. Dawes.      |
| 574. E. Hayes.      | 598. D. B. Parsons.              |
| 585. J. S. Wells.   | 629. J. Elsey.                   |
| 599. B. S. Cohen.   | 587. T. E. Symonds.              |
| 654. A. Keller.     | 632. W. H. Buckland.             |
| 739. S. L. Crocker. | 694. J. Tangye.                  |
| 571. T. E. Symonds. |                                  |

### PATENT ON WHICH THE STAMP DUTY OF £100 HAS BEEN PAID.

545. D. Lichtenstadt.